AN ESSAY ON THE DISORDERS OF PEOPLE OF FASHION; AND A TREATISE ON THE DISEASES INCIDENT TO LITERARY and SEDENTARY PERSONS.

By S. A. TISSOT, M. D.

Tranſlated from the laſt FRENCH EDITION:
With NOTES, by a PHYSICIAN.

EDINBURGH:
Printed by A. DONALDSON, and ſold at his Shop, corner of Arundel-Street, Strand, London, and at Edinburgh.
MDCCLXXII.

M

AN ESSAY ON THE DISORDERS OF PEOPLE OF FASHION.

By Mr. TISSOT, M. D.

F. R. S. London; of the Med. and Ph. S. of Basil; of the Oeconom. S. of Berne; and of the S. of Exp. Phy. of Rotterdam.

Translated from the last FRENCH EDITION:

With NOTES, by a PHYSICIAN.

EDINBURGH:

Printed by A. DONALDSON, and sold at his Shop, corner of Arundel-Street, Strand, London, and at Edinburgh.

MDCCLXXII.

ADVERTISEMENT.

THIS celebrated work has already been tranſlated into almoſt all the European languages. The preſent Edition has been carefully reviſed by a Phyſician, who has added notes, where needful, for explaining or illuſtrating the ſubject. There is only another Engliſh tranſlation beſides this, by one Mr. BACON-LEE, who has fallen into ſeveral material errors, which either his ignorance of Phyſic or perhaps the incorrectneſs of the French Edition from whence he made the tranſlation, has occaſioned: Many inſtances of theſe might be given, but we ſhall only ſpecify the few following as a proof of what is here aſſerted, inſerting the true reading in the oppoſite column.

Former Tranſlation.	*Preſent Tranſlation.*
Lond. Edit. Page 32. line 3, 4. —he loſt his army rapidly.	Edin. Edit. Page 26. line 5.—his ſtrength quickly failed him.
P. 43. l. 11—13 —his wife and children ſee no part of his body, and his breaſt is covered—	P. 35. l. 6.—8. —his wife and children know not the uſe of ſtays, and their breaſt is covered—
P. 76. l. 13.—the diſorder periſhes immediately.	P. 61. l. 23. —the patient dies ſpeedily.
P. 82. l. 6, 7.—but he is ſo unlucky that he deſtroys the edifice of his faſhionable pleaſures, which is become the foundation of his pains.	P. 65. l. 24, 25. —but he is ſo unlucky, that in rearing the edifice of his faſhionable pleaſures, he lays the foundation of his pains.

Former Tranſlation.	*Preſent Tranſlation.*
P. 83. l. 15.—and invigorating the body.	P. 66. l. 24.— and enfeebling the body.
P. 94. l. 3.—and order ſucceeds irregularity.	P. 73. l. 29.—which is very ſenſibly affected by their order or irregularity.
P. 119. l. 12, 13. — expelling the ſlime, filth, phlegm, and acids.	P. 93. l. 1, 2. abſtaining from fatty ſubſtances ſalted meats, paſtry, creams, and acids.
P. 128. l. 7. freſh food.	P. 98. l. 19. —cooling remedies.
P. 133. l. 11. —15.— prevent the ſpitting of blood, which but rarely happens; that the patient guides himſelf by the directions in § 98, which may cauſe it to ceaſe and prevent its return: and all other means ſhould be uſed for the ſame purpoſe, ſuch as, &c.	P. 102. l. 8.-13. it ſometimes happens, tho' rarely, that the diſeaſe makes all the progreſs mentioned in § 98, and that the patients even die without ſpitting any blood; in ſuch a caſe, every thing proper ought to be uſed to check the diſorder, the moſt effectual are, &c.
P. 139. l. 11. —Oatmeal and ſulphur.	P. 106. l. 24. —Oxymel and nitre.

Beſides, in the former tranſlation, *Sena* is always put for Jeſuits bark — *butter-milk* for whey — *pimples* for tubercles, &c. and there are alſo ſeveral ſentences omitted, with all the Author's Notes.

N. B. The notes marked *T.* are the Author's; the reſt are peculiar to this Edition.

TO THE

Baroneſs of WALLMODEN,

MADAM,

THIS little work, intended principally for the uſe of Ladies of Faſhion, ought to be more particularly offered to ſuch as unite the accompliſhments, virtues and charms of that ſituation without the prejudices. It did not, *Madam*, take up much of my time to diſcover a Patroneſs; your name is found cloſely connected with the moſt enlarged idea of a Dedicatory Epiſtle, or rather gives it birth, and proves, that, if I am incapable of writing a good book, I perfectly well underſtand how to inſcribe it. Receive it then, *Madam*, with that goodnature which is your peculiar characteriſtic,

teriſtic, and conſider it as an humble mark of the profound regard, and reſpectful ſentiments, with which I have the honour to be,

Madam,

Your moſt humble,

And moſt obedient ſervant,

Lauſanne, Feb. 3, 1770. TISSOT.

The AUTHOR'S PREFACE.

DUring theſe laſt hundred and fifty years, many volumes have been written on the diſeaſes of the poor, and their remedies; by which name the authors meant indiſcriminately all ranks of people: and though theſe works are badly executed, they at leaſt prove the importance of the object was known. It is now ten years ſince I have occupied myſelf in ſuch enquiries, and can venture to ſay, that of all my labours, this work has been the moſt pleaſing.

At the beginning of this century * RAMAZZINI, a celebrated Italian phyſician, publiſhed an excellent treatiſe on the diſeaſes of mechanics, in which he hath inſerted a chapter on thoſe of the recluſe. Hence ſeveral other phyſicians have handled the ſame ſubject, wholly or in part, but much leſs judiciouſly than he.

We have a great number of very good works concerning the diſeaſes of the army †.

Meſſrs. *Cockburn*, *Lind*, *Poiſſonnier*, have occupied themſelves with the health of mariners ‡; and we might form a ſmall library by collecting all that has been written concerning men of letters: upon which head, the circumſtances in which I have paſt the laſt four years, determined me to write a diſcourſe in Latin §, which I have ſince tranſlated, and conſiderably improved.

* *De morbis artificum.* This work appeared at Modena in 1700, and augmented with a ſupplement at Padua in 1713.

† Drs. Pringle, Van Swieten, Monro, and Brockleſby, may take place of all the other authors.

‡ Ramazzini has likewiſe given a chapter on this ſubject.

§ The Diſeaſes of Sedentary Perſons, which is bound up with this Eſſay.

It

It is obvious from the above enumeration, that much has been written on the health of people of all claſſes, except *People of Faſhion*, who are preciſely the very perſons whoſe health is the moſt ſhattered.

It is true, that the ſame *Ramazzini*, who has treated of the diſeaſes of the recluſe, the ſtudious, mechanics, ſoldiers, and ſailors, has given another work on the means *of preſerving the health of princes*, in which there are many things which may be applied to courtiers; but this work is more ingenious than practical, as he confines himſelf to diet, and ſays nothing of diſeaſes *: he has not therefore filled up the ſpace of which I treat. The only one to the preſent time who has touched upon the ſubject, is M. *Carl*, phyſician to the King of Denmark who in 1740, publiſhed a book called *the Court Phyſician* †, written in German, which has prevented my reading it, and which not being tranſlated into any other language, is of uſe but to one nation only, who are themſelves but little acquainted with it. We may then aſſert, that the work which bears this title, as yet exiſts not for the greateſt part of Europe, though ſo extremely neceſſary. But though I felt the neceſſity of ſuch a work, I was at firſt far from undertaking its removal. I repeat, *This ſubject was not of my choice*, and without enumerating the different reaſons which ſince induced me to write upon it, I ſhall only mention two which ſtrongly determined me againſt it; the firſt is, that I had deſtined every moment which I could detach from the avocations of my practice, to correct and finiſh my firſt

* *De principum valetudine tuenda commentatio*, Padua 1710. This work, if I miſtake not, was tranſlated into French in Holland.

† Medicina Aulica, &c. Altona, 1740

works,

works, and by degrees, one more conſiderable, to which the importance of its object, and the number of obſervations which I had made upon the ſubject had attached me. The ſecond, ſtill ſtronger, was, that it could not be properly effected but by phyſicians who reſide much in courts, and have great experience in large cities; who have ſeen, in the moſt expanded view, the reigning errors which detriment the health, and have multiplied their obſervations of the conſequences; and finally, whoſe *ſituation* has furniſhed them with numberleſs materials upon the ſubject. which *mine* has happily impeded me from making ſuch vaſt acquiſitions. It is amazing that none have executed a work of the kind I have undertaken: it is the buſineſs of the ſailor who has been in the midſt of the tempeſt to deſcribe it: he is certainly a better judge of the tumultuous elements than one who has always been at too great a diſtance to obſerve them completely; by living always upon the ſea, ſtorms become familiar, and are no longer regarded as an evil.

In doing what others ought to have done, I ſhall be happy, if, ſtruck with the omiſſion and imperfections of this little work, they ſhould be induced to fill up the one, and correct the other. But I muſt premiſe, to juſtify myſelf in part, that it was not my deſign to enter into long details concerning diet: enough is to be found on that ſubject in many works ſufficiently ample. We may refer to one *on Health* by Mr. Abbé *Jaquin*, or mine upon the *Health of Sedentary Perſons*. Nor ſhall I give complete treatiſes on each diſorder mentioned; my only aim is to give a general table of the *Errors of Regimen*, and their evil conſequences. I ſhall ſpeak of no remedies but what thoſe diſorders require: and finally, ſhall only make known

known to the patient what he ought to know, in order to concur in the cure, which is very often only impoſſible when the patient will not aſſiſt the phyſician.

Thoſe perſons whoſe health is the object of this work, are almoſt always within reach of aſſiſtance, and indeed the moſt eligible aſſiſtance: it is perhaps for this reaſon that their diſorders have not been treated as thoſe of other claſſes have; but accuſtomed to what is too often done for them, without any trouble to themſelves, they imagine that phyſic in all caſes may be brought to a ſimilar docility, and perſuade themſelves that they may be cured without any inconvenience to themſelves, or even joining in the cure. They think they do a great deal in taking the remedies preſcribed, but ſtill continue the ſame mode of life which brought on the diſeaſe: they would fain be cured while they labour to ruin health; and after having hurt their conſtitution, will give up nothing to re-eſtabliſh it.

It is doing them ſervice to make them ſenſible of the impoſſibility of their expectations being gratified; they are contrary to the immutable Laws of Phyſic, which are happily beyond the reach of man's fantaſtical will, or the caprices of faſhion. The cure of a diſorder varies and depends on many exigencies and circumſtances. It may be conſidered as a machine compoſed of many parts; if they do not all agree, if there is not a perfect harmony in all their movements, the effect muſt neceſſarily fail. All the experience and care of a phyſician cannot give health to the diſeaſed if he does not aſſiſt in the cure, by complying with whatever his diſorder requires, and abſtaining, as much as poſſible, from every thing which may retard or render his cure impoſſible.

AN ESSAY ON THE DISEASES OF PEOPLE of FASHION.

INTRODUCTION.

SECT. I.

WE are well and enjoy our health when all our functions operate with regularity, eaſe, and without obſtruction.

SECT. 2.

We enjoy perfect health when it is the leaſt ſuſceptible of irregularity, and not ſubject to be affected by common occurrences, and leſs by thoſe unavoidable things which phyſicians term *non naturals* *, from the uſe of which none can be

* *Non naturals.*] Phyſicians when conſidering the cauſes of diſeaſes, diſtinguiſh them into two claſſes; namely, ſuch as *predispoſe*, or prepare the body to be acted upon by the other

be exempted, ſuch as *viands, drinks, air, motion, reſt*, the *paſſions, ſleep, wakefulneſs, ſecretions*, and *excretions*.

SECT. 3.

We are delicate when affected by occurrences not carried to exceſs.

Delicate perſons are often well, but never ſure of continuing ſo long, becauſe their health depends too much on foreign circumſtances. Such a ſtate of exiſtence is not to be envied, ſince it is a perpetual vaſſalage, in which we are always compelled to fix our attention upon ourſelves in order to avoid dangers, not always to be known, or when known, avoided.

SECT 4.

Delicate perſons ſoon become valetudinary, by an habit which prevents the faculties from operating regularly, ſo that without any apparent diſeaſe, they are often out of order without being able to aſſign the cauſe. No doubt there is a cauſe, but ſo trifling as to be unperceivable. This ſecond degree of phyſical

ſet of cauſes which they term *occaſional*: in enumerating this laſt claſs they conſider them as ariſing from one or more of the ſix following heads. 1. Air. 2. Meats and Drinks. 3. Motion and Reſt. 4. The Paſſions. 5. Retentions and Excretions. 6. Sleep and Watching; all of them neceſſary to the preſervation of health and life, ſo long as properly enjoyed, but from the abuſe of which ſpring all the infinite number of diſeaſes to which the human race is ſubjected. It is by conſidering in what manner people of faſhion uſe or abuſe theſe, that we can account for their being ſubject to ſome diſorders more than others; and having once found out the ſpring and origin, a great ſtep is gained towards the cure of diſeaſes.

delicacy

delicacy is miſerable indeed; for the *flow of life* which characteriſes good health, and which according to natural philoſophy is the true ſource of happineſs, is wanting.

They are ſcarce ever well; one day of health is bought by months of anxiety, and the irregularity is ſometimes univerſal throughout the faculties, without being peculiarly diſtinguiſhable in any. They ſuffer a general depreſſion without being able to point out their complaint. Many are deſirous to exchange ſuch a ſituation for a violent and dangerous diſeaſe, if limited, or even for death itſelf when it is arrived to its laſt hopeleſs period, and when the moments of life are counted only by pain—but death often makes them wait: and I have frequently ſeen, with equal grief and aſtoniſhment, valetudinarians, oppreſſed with the weight of continual anguiſh, at times tormented with grievous diſorders, reſiſt him for many years, and neither able, critically ſpeaking, to live or die, but victims to a ſtate of exiſtence of which the cauſes have not yet been ſufficiently aſſigned, called the Avarice of Life.

SECT. 5.

The number of delicate perſons, and of valetudinarians, are not equally diſtributed through the different degrees of ſociety: There is one in which they are much more numerous than in the reſt, and in this degree we find ſome kinds of diſeaſes much more frequent than elſewhere.

1. Which is that degree?

2. What are the cauſes which ſo unhappily diſtinguiſh it?

3. What are its diſeaſes?

4. Which are the methods of cure?

Theſe are objects upon which it would be proper to fix the attention of thoſe perſons intereſted therein, and their phyſicians. I ſhall examine them ſucceſſively; but we muſt firſt of all determine what is the habit of body which gives each faculty that permanent regularity that conſtitutes good health, and what claſs of men it is moſt frequently found in.

ARTICLE

ARTICLE I.

The CAUSE of GOOD HEALTH.

SECT. 6.

THREE things principally conſtitute perfect health: the firſt is a ſtrong fibre *, which giving a proper degree of motion to the veſſels and arteries, maintains the regularity of the animal functions; while a fibre too relaxed, wants ſtrength, and is incapable of the leaſt degree of exertion without manifeſt inconvenience: the blood in the ſmall veſſels circulates imperfectly; the humours for want of motion corrupt, and become ſharp: the ſecretions, the name given to the ſeparation of the fluids, ſuch as ſpittle, phlegm, bile, ſweat, &c. in the organs deſigned for the operation——the ſecretions, I ſay, are imperfectly performed.——The blood is clogged with part of thoſe humours which they ſhould diſcharge, and the functions to which thoſe humours were neceſſary ſuffer by their want, or by their bad pre-

* *Strong fibre.*] A proper ſtrength of fibre is undoubtedly neceſſary to conſtitute *good health*; but at the ſame time we muſt obſerve that there are limits beyond which the ſtrength of fibre ceaſes to be ſalutary, but on the contrary is productive of many ſevere diſorders.

paration. Hence it ariſes, that the bad quality of the ſpittle diſorders the teeth, and hurts digeſtion. Whether the bile does not ſeparate, or ſeparates improperly, its effects import that the inteſtines are vitiated, and the health conſequently ſuffers.

Hence we ſee, from this firſt condition, ſufficient ſtrength in the fibres, and conſequently in the veſſels and arteries, which are fibrous, ſecures the perfection of the animal functions, among which the heart, the principal cauſe of motion, and the ſtomach, are the moſt important; when they perform their functions well, it is rarely that any other is diſordered. Thus in reciting the firſt condition requiſite to health, we may join the regular motions of the heart to thoſe which are digeſtive.

Sect. 7.

The ſecond condition neceſſary to a perfect ſtate of health, is an equal perſpiration, and when the firſt condition exiſts, this generally takes place. Perſpiration is the moſt conſiderable evacuation of any, it equals at leaſt the one half of what we eat and drink; if it is incompetent, the body is over charged with ſharp humours, which it ought to diſcharge; by this means we are oppreſſed by the retention of ſuch a maſs of humours; and if this acidity depoſits itſelf upon the ſkin, it produces many maladies, but if it fixes itſelf upon any interior organ, it produces diſeaſes of a much more ſerious nature *.

Sect 8.

* In this country it is moſt commonly thrown upon the lungs, as the great number of conſumptive perſons ſufficiently prove:

Sect. 8.

A third condition, without which the health is very precarious, is to have firm, ſteady nerves, that is to ſay, not being too ſenſible to impreſſions, but which return to the organs of ſenſation nothing but what is proper, nor diſorder the whole frame for a trifling cauſe, as it happens to all who have weak nerves, which having part in all the animal functions, cannot but impede their progreſs, when ſubject to too great a degree of ſenſibility, which renders the impreſſion of what acts upon them more affecting than they can bear. Their motion on the parts through which they are diſtributed, is too ſtrong and irregular; whence ariſes an univerſal diſorder throughout the animal ſyſtem, and a deprivation of health.

Sect. 9.

From what I have advanced it is evident, that a ſtrong fibre, an equal circulation of the blood, a regular digeſtion, a properly ſupported and ſufficient perſpiration, and finally, ſteady nerves, are the real requiſites to aſſure an enjoyment of good health, and are found with thoſe who enjoy it moſt.

If it is demanded who enjoy thoſe requiſites, reaſon replies, the labourer, who, in this reſpect, is ſuperior to the mechanic, but unhappily inferior to the labourers of former times

prove: Rheumatiſms, and many other diſeaſes, owe their exiſtence to this cauſe.

—times

—times when labour alone was his employment.—Nay, at preſent there are nations, who, unknown to polite diſeaſes, die only by accident, or through age.

According to our departure from habitude, our health gradually diminiſhes; our labourers are not equally robuſt, becauſe they do not live a life equally rural; many have been ſervants, others ſoldiers, and infected the village with the cuſtoms of the city.

The different mechanics employed by citizens, independent of the diſeaſes incident to their various avocations, prejudiſe their healths, by departing from rural ſimplicity, which dictated by nature, does that which is moſt analagous to our conſtitution.

Where Nature's laws o'er-rule capricious ſenſe,
A healthy body is the recompence.

The deviation from ſimplicity increaſes among the more ſubſtantial citizens, and their health proportionably diminiſhes; they exhibit many diſeaſes unknown to the fields, and which are triumphant in high life; an order in which we muſt comprehend, if we conſider health relatively, all perſons, who, though not of the ſame rank, purſue the ſame courſe of life; that courſe of life, which, having nothing uſeful to ſupport it, depends upon continual diſſipation—introduced and continued by the ſons of idleneſs, who, to defeat the inſupportable tediouſneſs of a life diſagreeably inactive, attempt to kill time by pleaſure: but as real enjoyment is merely relaxation, they are compelled to have recourſe to artificial ſubterfuges, whoſe only merit are ſingularity,

ſingularity, in oppoſition to nature, and the glare of deceptive ſhow. Such pleaſures may be real to ſuch as fancy themſelves to be merely machines; an aſſertion which no arguments can maintain, and which detaches us from all that is dear. Undoubtedly the origin of luxury, which is only the combination of a multitude of ſuperfluities, was invented by man to mingle variety with his being, or perhaps to diſtinguiſh himſelf: This is the perfect ſituation of the whimſically hippiſh, who require a great number of remedies to cure them of nothing. The healthy infant is amuſed with any thing, while the ſickly child plays with every toy without being pleaſed.

Unhappily this falſe taſte is contagious, for from thoſe who invented it through neceſſity, it hath paſt as a faſhion to ſuch as it detriments very much. It is generally among the well educated, who ſeem to propoſe it as the principal object of their purſuit; they are ſo careleſs with regard to health, that the greateſt part of their diſeaſes are ſcarcely known in the country; thoſe which are common to both places, have very different effects, and are much leſs malignant in the country than in town.

Sect. 10.

To aſſign the cauſe of ſuch difference, we muſt examine in what manner the ſix non narals *; which I formerly mentioned, are uſed, as they affect mankind in general, as well with regard to his formation, as the va-

* *Non naturals.*] See note, page 1.

riations

riations observable in his temperature and health.

In comparing the food and drink of the labourer with the nutriment of people in *high life*, the air breathed by each, the exercises they take, their sleep, the regularity of their secretions, and, above all, their passions, we shall easily perceive the cause of their different temperaments, their health, and their strength.

ARTICLE

ARTICLE II.

Of ALIMENTS and LIQUIDS.

SECT. II.

THE coarſeſt bread, porridge, which is often only bread ſoaked in boiling water, and ſeaſoned with a very little butter and ſalt, ſkimmed milk, butter milk (in both caſes the greaſy particles are ſeparated from the milk) whey ſeparated from both greaſe and curd, rarely new milk; new cheeſe, for the moſt part of the pooreſt ſort, with very little ſalt; vegetables, and thoſe commonly the leaſt ſavoury, ſuch as radiſhes, beans, kidney-beans, cabbages, beet-roots, lettuces, potatoes, leeks; ſome common fruits; rarely butchers meat, and ſometimes bacon, which is only ſeaſoned with a little ſalt, are almoſt the only things which compoſe the food of the labourer, attached to what is really advantageous to him, regardleſs of cuſtom.

His only foreign ſeaſoning is pepper; he ſometimes adds onions, or in ſome countries garlick: himſelf, his wife, and his miller, furniſh his houſehold, get in the harveſt, and prepare the food. His drink is generally water.

SECT. 12.

Sect. 12.

If we compare theſe aliments with thoſe inveſtigated in many volumes, they will appear a very incomplete collection; for except the bread, which, however is widely different, the ſalt, butter and pepper, we find none of them on the tables of the great; or if they are permitted to appear, they are ſo much diſguiſed, as not to be eaſily known.

The moſt juicy meats, the higheſt flavoured game *, the moſt delicate fiſhes ſtewed in the richeſt wines, and rendered ſtill more inflammatory by the addition of aromatic ſpices; poultry, crawfiſh, and their ſauce; meat gravies, variouſly extracted; eggs, trifles; the moſt ſavoury vegetables, the ſharpeſt aromatics laviſhly uſed; ſweet-meats of all kinds, brought from all parts of the world; candies infinitely various; paſtry, fries, creams, the ſtrongeſt flavoured cheeſes, are the only viands introduced by taſte.

* *Game.*] Our ingenious author in enumerating the abuſes with reſpect to foods, which have crept to the tables of the great, has overlooked one of the greateſt, and which, I am certain, is productive of as much miſchief as any he has mentioned; I mean the practice of keeping game, and ſome kinds of animal food, till ſuch time as, by putrefaction, it becomes a nuiſance to thoſe whoſe taſte is not ſufficiently refined for ſuch *delicacies*—All animal food is *putreſcent*, and game particularly ſo: Feed any one, for no very great length of time, upon ſuch diet, in its freſheſt ſtate, without allowing a proper proportion of vegetable aliment to correct it, and you will very ſoon ſee it productive of putrid diſeaſes: How much more deſtructive to health muſt the uſe of aliments be which are putrid ere they are taken into the body, and where, like any other ferment, they diffuſe their malignant influence through the whole maſs.

The

The ſtrongeſt wines brought from every place which produces them; brandy, in the moſt attractive and dangerous forms; coffee, tea, and chocolate, are found upon their tables.

If we calculate the hands employed to furniſh out a middling entertainment, we ſhall find them amount to ſome hundreds; for grand feſtivals we muſt count by thouſands. It is eaſy to perceive the different effects of ſuch oppoſite regimens.

Sect. 13.

The firſt may be reduced to aliments compoſed of flour and milk, juſt ſufficiently flavoured to flatter thoſe organs diſpoſed to be agreeably affected by the neceſſaries which it is their buſineſs to receive. By this means ſuch food loſes what made it perniciouſly agreeable, and conſequently man for whom it was intended as mere nouriſhment, takes no more of it than what is neceſſary. His ſtomach is therefore never over-charged by quantity; the preciſe maſtication, at preſent only obſervable in low life, greatly facilitates digeſtion, and effects it without trouble. The food neither curdles nor corrupts; no acidity, no ſharp fumes diſorder either ſtomach or bowels: it cauſes neither cholics, coſtiveneſs, nor purgings, but forms a ſoft chyle, which paſſes through the veſſels without irritating or rendering them feveriſh, and by its glutinous quality repairs what we loſe, and gives additional nouriſhment, while its earthy and watery ſuperfluous parts are voided excrementally according to the intent of nature. In a few hours the diſtribution and employment of this firſt meal is completed, appetite returns,

and is gratified with the ſame pleaſure; and the ſame order is continually obſerved.

Sect. 14.

A perſon in high life generally gratifies appetite, and dilutes thirſt with the ſharpeſt things, or things which have ſo pleaſing an impreſſion on the palate as to excite a deſire to indulge with more than is needful, which is leſs than what the working labourer requires: hence ariſe the inconveniencies attendant on repletion; his ſtomach being affected becauſe the nerves are more ſo, ſtruggles the whole frame into diſorder; the chyle, as ſharp as nouriſhing, communicates the tremor to the veſſels; the rapidity of the pulſe, ſome hours after ſuch a meal, proves its effect. This temporary fever, which continually ſeeks relief, being daily repeated, muſt inevitably wear out the conſtitution; all the organs of ſecretion being inflamed; the functions are diſordered, and the whole animal œconomy thrown into confuſion. The moment the next meal is prepared, he ſits down to eat, not that he has any occaſion, but is cheated into deſire by the uneaſineſs of his ſtomach, which he ought to qualify with a little freſh water and then fancies himſelf hungry, and will eat. Variety, ſmell, colour and ſteam, invite: he decides in favour of a particular diſh—he is ſerved, and taſtes it, but ſends it back and tries another: he eſſays a multitude, and eats of ſome, the catalogue of which would almoſt make a volume. They are compoſed of an infinite number of articles, the mixture of which is one of the greateſt obſtacles to digeſtion; tender meats, vegetables and fruits, are corrupted, and their digeſtion prevented by other aliments,

or

or by drinks, from whoſe long ſtay on the ſtomach, corruption, rather than digeſtion, takes place; continual irritations very oppoſite to thoſe ſenſations which characteriſe health.

The firſt of theſe regimens favours the conditions requiſite to health, the latter totally deſtroys them.

We have regarded the uſe of ſalt, leaven, and inflammatory drinks, as the principal cauſes of the ſhortneſs of human life; and it naturally appears to be ſo; for whatever quickens the motion of the heart, ſhortens the thread of life: but what compariſon can be made between the internal irritation of ſalt, leaven, and the moderate uſe of ſtrong liquors in former times, and the meats and drinks at preſent prepared for the tables of the great? What difference in the effects from the ſame cauſes? The ſame regimen which prolongs life, beſtows good health. We may eaſily perceive how much this deſtructive regimen, which renders exiſtence ſo miſerable, tends to abridge it.

It would be uſeleſs to enter into a larger detail on the pernicious effects of each particular aliment or drink here indicated, they may be found in more copious works. It ſufficeth in my plan to make known the dangers in general.

I ſhall ſpeak now of what regards air.

ARTICLE III.

Of AIR.

SECT. 15.

IN this article people in high life ſeem to have the advantage, If we compare the air of their apartments, which are large, lofty, often airy, and always clean with the ſmall chambers of the lower claſs of people, which the author of *Advice to the People* has obſerved, are generally infected, we ſhould imagine the air, breathed by the former, is far preferable to that breathed by the latter. But in the firſt place, the labourer reſides but little in his chamber, paſſing the greateſt part of his life in the open air, which is much ſuperior to what is found in elegant apartments, be they as large and convenient as poſſible. The inhabitant can only be furniſhed with town air, which even in the ſtreets, and moſt healthy places, is far inferior to the air of the country, but very unwholeſome in many quarters. In the ſecond place, this air is often detrimented by their perfumes, whoſe effluvia, in fact, does not diſperſe any of the impure exhalations of lowly habitations, but frequently by determining the

the blood towards the head, and affecting the nerves, prove equally hurtful.

Sect. 16.

Thirdly, The peaſant, breathes the air in its pureſt ſtate. He riſes and goes to bed with the ſun, and enjoys all the advantages which the preſence of that planet above the horizon beſtows on the atmoſphere. Advantages demonſtrable by the daily obſervations of the effects they produce upon animals and plants, and which proves that its influence is the ſoul of whatever exiſts.

The morning air gives to him who breathes it, a ſtrength and ſpirits which he feels the remainder of the day; the exhalations from the ground, the moment the plough opens the furrows, thoſe of the dew which is the juice of vegetables, are a volatile balm, and thoſe of the flowers, which are never ſo lively as when the ſun riſes, give ſuch as enjoy the country air, under theſe different circumſtances, a principle of life unknown to thoſe who only breathe the air of chambers; who by their care to ventilate them, prevent it from becoming malignant, but cannot render it ſalutary; it ſufficeth to ſupport life, but cannot eſtabliſh it.

Sect. 17.

A fourth obſervation to be made is, that air freely circulated, which the peaſant enjoys, is another grand cauſe of ſtrength and health, which the opulent man, who ſeldom quits his apartment, and carefully avoids the leaſt breath of wind,

wind, who always goes out in a coach or chariot, where no more air is admitted than what will juſt prevent ſuffocation, is deprived, and that privation muſt undoubtedly be pernicious.

Wind is one of Nature's grand agents, the impreſſions of which are neceſſary to all organiſed bodies. Motionleſs air is to animals and plants the ſame as ſtagnant waters to fiſhes formed to exiſt in rivers. Thus, in being anxious to preſerve ourſelves from the wind, we do ourſelves a real injury: and this dangerous precaution expoſes us to many ſerious evils, at the ſame time that we cannot abſolutely avoid it, which often happens.

It is aſtoniſhing that man, who cannot exiſt a moment without air, is ſo terribly afraid of it, and ſo little attentive to the quality of what he breathes: he cannot be doubtful but that ſavage nations, (and ſuch there are) and even thoſe whoſe food is unwholeſome, are healthy from being expoſed to the air. And it is now known, without admitting a doubt, that ſheep whom no care, no regimen, no noſtrum, can ſecure from the rot, are ſufficiently ſafe if folded, during the winter, in the open air. That theſe compariſons drawn from ſavages and animals, may not be objected to, it muſt be premiſed, that the general laws of the animal œconomy are the ſame with reſpect to men and brutes, and the baleful influence of the air equally affects the health of the greateſt beauty beneath her gilded roof, the ſheep in the fold, and the plant in the greenhouſe: we are ſenſible of the prodigious difference in ſtrength and vigour, between a plant which grows in the open air, in a ſoil but little cultivated, and one trained up under cover by

by the aſſiſtance of ſtoves. This difference is diſtinguiſhable between the citizen and countryman. And the paleneſs of him who ſeems to live only in the night, reminds us of that dingy whiteneſs which is the general colour of ſuch flowers as are ſheltered from the direct rays of the ſun, and the brightneſs of the day *.

* *Air.*] With reſpect to this article of air, people of faſhion, as our author very juſtly obſerves, deprive themſelves voluntarily of a bleſſing which the peaſant enjoys. That air is neceſſary for life is clear from the many experiments which the air-pump affords; but it is not only neceſſary to have a certain quantity of air, but we muſt likewiſe have a change or free circulation of it: Every time we inſpire, we take in by our lungs ſomething ſalutary from the air; every time we perform expiration we throw out ſomething noxious from our lungs—By this we may judge that in a very ſhort time the air will be deprived of its ſalutary and loaded with noxious particles——hence the neceſſity of a ſupply of freſh air. How far the preſent mode of finiſhing the apartments with ſtucco, and making doors and windows ſo cloſe, is productive of this neceſſary renewal of air, I leave every one to judge who has ſeen the neceſſity of erecting ventilators, in new built houſes, in order to force up the ſmoke of the chimnies, a ſure ſign of the want and neceſſity of a proper circulation of air; but further, people of rank being bred up in, and accuſtomed to, ſuch warm apartments, think then what they muſt ſuffer, when after being ſtewed up in public places, heated not only by the number of lights, but likewiſe by the crouds of people met together, they expoſe themſelves at parting, when perſpiring highly to all the miſchiefs ariſing from cold moiſt air applied to bodies in that ſituation;——hence, the numbers we hear daily complaining of having caught colds, ſore throats, rheums, and a thouſand other complaints, after being in crouded places of public entertainment.

ARTICLE

ARTICLE IV.

Of Motion and Rest.

Sect. 18.

THERE are two principles equally demonſtrable in that part of phyſic which conſiders the mechaniſm of the animal functions, called *Phyſiology*; the one is already pretty explicitly mentioned, that ſtrength, and the regular circulation of the blood, are the baſis of health: the other, that nothing aſſiſts the circulation ſo much as exerciſe, of which there are none but muſt have noticed the viſible good effects, ſome time in their lives, in themſelves or others. Theſe two principles admitted, we may at firſt ſight, deduce a judgment therefrom, which manner of life is moſt conducive to health, that of the opulent, ſhut up in his own houſe, or carried about in vehicles contrived by art to move rapidly without communicating motion to thoſe who are incloſed in them; or that of the labourer, who is in a continual motion, tolerably equal: *This* enjoys all the benefit of exerciſe, *that* is a victim to all the ill conveniencies attendant on inaction, and to thoſe which are the effects of violent agitation, ſuch as rapid hunting, dancing, a quick journey, or other briſk motions, which are extremes oppoſite to his

his ordinary manner of living; while the labourer is equally unacquainted with inactivity, or too violent motion. He ſometimes makes efforts which have their inconveniencies, but different from thoſe produced by too quick a motion. He ſcarcely knows what it is to run; his dances are not over heating; he does not hunt; and when he is obliged to exert himſelf too much, 'tis in conſequence of his dependance on the wealthy, when he may be deemed the victim of their irregular manner of life.

Sect. 19.

The order which authors, who have treated on diet, have commonly obſerved, leads me to ſpeak concerning ſleep; but as it principally depends on the paſſions, I ſhall make them to precede that article, though generally placed as the ſixth, when perhaps it ought to have been the firſt.

Motion and reſt.] For the diſadvantages ariſing from too great an indulgence of reſt and want of exerciſe, ſee our author's treatiſe on the Diſeaſes of Sedentary People.

ARTICLE

ARTICLE V.

Of the PASSIONS.

SECT. 20.

THE paſſions have a more eſſential influence and efficacy on the health of man than motion, aliments, or even air itſelf. Strong paſſions, though the moſt agreeable, always exhauſt, and ſometimes kill upon the ſpot: the ſorrowful paſſions abſolutely deſtroy the animal œconomy, and doubtleſs, are the general cauſes of languiſhing diſeaſes.

If we compare the ſituation of a man in high life, to thoſe of the lowly, when under the influence of paſſion, a greater difference will be obſerved than in any other article. Before we come to this parallel itſelf, let us for a moment conſider the ſimple action of the ſoul with reſpect to theſe two claſſes of men: we ſhall find it labours greatly in the one, and very little in the other; becauſe the firſt has continually before his eyes, and in his imagination, a variety of objects that keep him in continual agitation, while the other is troubled with very few, which preſenting themſelves to him regularly as they ſucceed each other, he can almoſt tranſact his buſineſs

buſineſs like an automaton without any reflection. This œconomy of ideas is one of the ſureſt preſervatives of health, which is almoſt always in an inverſe ratio with the faculties of the ſoul; on this occaſion we may apply thoſe beautiful lines of the epiſtle to Monſieur Montule:

Unerring Nature, whom true wiſdom guides,
For all her children equally provides;
In brutes an inſtinct limited diſplays,
And gives them health, denying Reaſon's rays.

SECT. 21.

If we only uſe them in thinking deeply, or ſtrongly agitated, we ſhall diſcover how the paſſions detriment us; there is between them and mere intenſe application, the ſame difference as between convulſions of the body (ſtrong paſſions are the convulſions of the ſoul) and great exerciſe.

The ambition of honour, the love of titles, the deſire of poſſeſſing ſuch a fortune as luxury renders neceſſary, are three principles that inceſſantly animate the man in high life, keeping his ſoul in continual agitation, which alone would be enough to deſtroy his health; frequently expoſed to a reverſe of fortune, to mortifications, to ſorrows, to humiliations, to rage, to vexations, which continually imbitter his moments; and what aggravates the danger of ſuch diſtreſſing impreſſions, is the neceſſity he is under to conſtrain or maſk them.

SECT. 22.

Sect. 22.

The labourer has no ambition but to have a plentiful crop, and does not place his happineſs in a multitude of objects, which being likewiſe the happineſs of others become ſubjects of rivalſhip; a prize that every one diſputes: all his wiſhes are for a fertile ſeaſon, and his neighbour's wiſhes are the ſame; they do not run counter to each other: but the man who is only happy in his expectations of a place of dignity, penſion, title, favour, or even a ſmile, which a hundred beſides himſelf, of more influence and merit, are equally ambitious to obtain, lives ſurrounded by a world of enemies, by each of whom all his actions are ſuſpiciouſly obſerved. Fear, diffidence, jealouſy, and averſion, reſide in his heart and diſorder his ſeveral functions.

Lanciſi, principal phyſician to two popes, and long a witneſs of the tumults of a ſtormy court, has long ago mentioned the impoſſibility of courtiers being healthy; "*becauſe*, (ſays he) "they take no exerciſe, and their minds be- "ing continually agitated between hope and "fear, never have a moment's repoſe; it is "therefore not at all ſurpriſing if they are "weak and expoſed to hypochondriac com- "plaints and diſeaſes of the head *."

In this continual conflict of jarring intereſts, when one of the competitors ſucceed, the ſouls

* De Nativis Romani Cœli qualitat. cap. 17. In the preceding § he very well deſcribes the dangers ariſing from the mode of life adopted by the nobles and rich inhabitants of Rome. *T.*

of

of the reſt are cruelly torn; and what is ſtill more diſtreſſing, in the very moments when they are on the brink of deſpair, they often find it an indiſpenſible duty to go and embrace their ſucceſsful rival with a countenance of ſeeming ſerenity. The love of rank in all people, their ardour to eclipſe their equals in all things, is obvious in various ſituations; but ſtronger, undoubtedly in courts than elſewhere. In the mean time it exiſts, and is well ſupported in every city where a number of people of condition are aſſembled, and where, on that account, there are the ſame objects to excite emulation, preſenting every moment ſome cauſe of diſcontent. When the ſoul is in ſuch a ſituation it neceſſarily influences the health.

SECT. 23.

Examples of perſons who have died on the ſpot through the effects of ſtrong paſſions are not rare, authors abound with them.

The emperors *Nerva* and *Valentinian* periſhed by exceſs of rage *; *Vinceſlaus*, King of Bohemia, died in the ſame manner.

Exceſſive grief, whatever be the object, is not leſs fatal: *Adraſtus* died on his return from the ſiege of Thebes, on hearing of the death of his ſon *Agyales*, and the news of the death of *Edward* the Black Prince, killed his father *Edward* the third. The daughter of *Caſar*, and the Empreſs *Irene*, died on being informed, the former of the

* Nerva was offended at Regulus, one of his officers, and Valentinian at the Sarmates who had made inroads into Illyria. His paſſion was ſo violent, that while he threatened inſtant deſtruction to their nation, he was ſeized with a vomiting of blood, which carried him off. T.

death of *Pompey*, the latter of that of the Emperor *Philip*, their reſpective huſbands. *Antigonus Epiphanus* could not ſuſtain the ſhame of a defeat; he declared to his friends that grief killed him: his ſtrength quickly failed, and he died ſoon after.

Joy itſelf has its martyrs. When the three ſons of *Diagorus*, victors at the Olympic Games, came to place their crowns upon the head of the happy parent, he could not ſuſtain the extaſy, and died on the ſpot. Such ſenſibility, impreſſed by good fortune, is too affecting; our nerves were not formed to bear ſuch extremes, and probably thoſe of his heart were rendered paralytic.

The amazing applauſe beſtowed on a new Tragedy of *Sophocles*, and a new Comedy of *Philipidas*, each being advanced in life, was productive of a fatal ſatisfaction to both.

But of all the paſſions there are few that murder ſo many as ſucceſsleſs ambition or humbled vanity; examples of which occur in no part ſo frequently as in courts.

Alonſo Pinſon, one of the lieutenants to *Chriſtopher Columbus*, who was in great haſte to arrive before him at court, on the return from their expedition, died of grief becauſe they would not receive him without his chief. And captain *Monk*, that able mariner, the firſt who penetrated to the extremity of Hudſon's bay, offended at the manner in which he was treated by the king of Denmark, upon his going to take leave of him in order to embark for a ſecond expedition, was ſeized on the ſpot with a fit of grief, retired to his bed, and expired ſoon after.

In a late work *, we read that one of the firſt

* Tiſſot's letter to Haller. T.

magiſtrates

magiſtrates of a republic in Switzerland, fell down dead at the feet of his rival, who came to ſupplant him, on his approaching him with a ſmiling countenance in order to be congratulated. And one of the greateſt profeſſors that Germany hath this age produced, having received an affront from one of his colleagues in diſputing the paſſage, could not overcome the vexation, but died in a few days.

Such exceſſes of paſſion are not to be ſeen every day; but thoſe examples which prove their force, teach us that their effects are dreadful. In a leſs degree they do not appear ſo fatal, though they ſtill do much miſchief: They ſow the ſeeds of diſorders languiſhingly oppreſſive, which in time diſplay themſelves and deſtroy without our ever being ſenſible of their origin. As great employments expoſe us to the frequent effects of quick paſſions, courts muſt of neceſſity be the moſt unfavourable places to health: the more the number of circumſtances are increaſed by which happineſs is enſlaved, the more is that happineſs diminiſhed.

Sect. 24.

The crowd of people with which the man of rank is ſurrounded, and whom he thinks neceſſary to his occaſions, in reality multiply his troubles, diſturb his repoſe, and are a continual ſource of confuſion to him, becauſe his happineſs depends upon a number of inclinations, which he can never completely control, but finds as many obſtacles as heads.

The peaſant, without ambition, title, favour, or variety, and ſcarce any riches; ſole artificer of his own good, having none about him but

his relations, or a ſmall number of domeſtics, who, being his equals, think like him, and live with him, have the ſame will as himſelf, or at leaſt ſubmit their will to all his wants, is not the victim of any of thoſe deſtructive paſſions. If he at any time experiences them, they are much weaker, and much more eaſy to pacify; his ſenſibility being leſs, he is leſs forcibly affected: the loſs of perſons to him the moſt dear, ſcarce touches him; that of his effects, not much more, becauſe poverty itſelf would hardly alter his manner of living: beſides, he is never ſenſible but to the preſent, while the affluent dreads the future—his imagination diſordered by the agitation of his nerves, fills him every moment, with the vapours. Numbers of ladies are under an impoſſibility of being well, without mentioning other cauſes, by the continual ſucceſſion of their fears, which every inſtant throws them into a violent ſituation, abſolutely diſorders the whole animal œconomy; they ſcream out, if the leaſt irregularity of the ground cauſes their coach to lean more on the one ſide than the other; while the labourer going before the brilliant equipage, will almoſt ſuffer it to run over him before he turns his head, or thinks of ſtepping aſide to avoid it.

Sect. 25.

This great ſenſibility occaſions people of rank to be the victims of their moſt laudable feelings; all that afflicts or threatens others, all the evils incident to mankind in general, or merit in particular, are to them real grievances, affecting them very frequently, more than their own private complaints, and eſſentially deſtroy their health; in a word, infinitely more ſenſible of tender

tender impreſſions *, and expoſed to a much greater number than the peaſant, of neceſſity they muſt ſuffer much more.

* Our author has taken notice of the pleaſures of love under the article of ſecretions, but I cannot help thinking he might have taken in the pangs of unſucceſsful diſappointed love under this head of paſſions of the mind: and in this reſpect, the peaſant will be found to enjoy many advantages which the ſubjects of this diſſertation want: People, according to their rank, educate their children and accuſtom them to a correſponding manner of life, to keep up this rank; and to ſhow away in the ſame line in which they have been educated, it is neceſſary to look for proper matches for them, which is only judged in the preſent age by weight of purſe; and young people have ſometimes no alternative, but with a heart already pre-engaged, to marry another one they hate, or ſtarve. Family-pride as well as avarice is productive of many diſappointments of this kind, to which the peaſant is very little expoſed: For a beautiful deſcription of this paſſion, ſee Sauvages Noſologia Methodica, vol. II. page 252, quarto edition.—For the effects of the other paſſions on the human body, as cauſes of diſeaſe, the reader may conſult that elegant compendium of medicine, Home's Principia Medicinæ, page 14, de Cauſis Morborum remotis.

ARTICLE VI.

Of SLEEP and WATCHING.

SECT. 26.

OUR ſlumbers are chiefly affected by the influence of the paſſions; the length of our ſleep, its regularity and tranquillity are the ſtrongeſt appendages of health. If, in this reſpect, we draw a parallel between the rich and brilliant inhabitants of cities, and thoſe of the country, we ſhall find all the advantages in favour of the latter. The hour when he retires to reſt, which is that deſigned by nature, obviouſly marked for the repoſe of all animals, and the diſpoſition he is in when he reſigns himſelf up to it, renders it impoſſible that the ſleep of the one ſhould reſemble that of the others. The peaſant whoſe nerves are not agitated by any affection of the ſoul, or blood inflamed, or ſtomach labouring with the effects of an erroneous regimen, lays himſelf down and ſleeps; his ſlumbers are tranquil and profound; it is difficult to wake him, but the moment his ſpirits are recruited, he awakes, he is perfectly eaſy, freſh, ſtrong and light. The man of faſhion, diſturbed by buſineſs, projects, pleaſures, diſappointments, and the regrets of the

the day, heated by food and drinks, goes to bed with trembling nerves, agitated pulſe, a ſtomach labouring with the load and acrimony of his food, the veſſels full of juices which inflame them, indiſpoſition, anxiety, the fever accompanies him to bed, and for a long time keeps him waking; if he ſhuts his eyes, his ſlumbers are ſhort, uneaſy, agitating, troubled with frightful dreams, and ſudden ſtartings; inſtead of the labourer's morning briſkneſs, he wakes with palpitations, feveriſh, languid, dry, his mouth out of order, his urine hot, low ſpirited, heavy, ill tempered, his ſtrength impaired, his nerves irritated and lax, his blood thick and inflamed; every night reduces his health, and fortifies the ſeed of ſome diſeaſe *.

* Our ingenious author has entirely omitted the faſhionable cuſtom of turning night into day, and day into night, by which the votaries of chance and wine are deprived of all the advantages mentioned § 16: I have known people accuſtomed to a regular life in the country, and of a good conſtitution, ſo much the worſe of one faſhionable winter in town, that it required their native air and proper regimen to reinſtate them in their former health.

ARTICLE

ARTICLE VII.

Of Secretions and Excretions.

Sect. 27.

THE ſecretions and excretions, or in plain terms, the ſeparations and evacuations, are very important functions in the animal ſyſtem. Secretion conſiſts in the ſeparation of certain particular humours in the organs intended for that purpoſe, from whence they are conveyed into other parts where they are uſeful. Hence it is that the ſeparation of the ſaliva or ſpittle is performed in the glands that ſurround the mouth, and then carried into the ſtomach; that of the bile is performed in the liver, and repairs to the inteſtines.

Excretions are thoſe evacuations which carry out of the body the ſuperfluity of the aliments, thoſe parts which cannot be aſſimulated, or become part of ourſelves, and are called excrements; perſpiration, urine, and ſtools, are the principal; they are the beſt performed when food is ſimple, the manner of living ſober and regular, the ſleep tranquil, the air we breathe pure, the body exerciſed, when we are but little diſturbed by the paſſions. Hence it is eaſy to comprehend how theſe functions are better performed with the peaſant than the man of faſhion.

Sharp foods, heating drinks, inflaming ſpices, abſolutely diſorder the ſecretion of the humour termed gaſtric juice, which if ſeparated in the ſtomach

ſtomach to forward digeſtion, thicken and harden the bile itſelf, obſtruct and influence its channels, cauſe coſtiveneſs, maintain a degree of fever; all the ſecretions and evacuations are diſordered. Idleneſs *, though it operates differently, produces at length almoſt the ſame effects: But it is certain that it is the paſſions which abſolutely diſorder the functions of theſe two claſſes, grief, wearineſs, anxiety, envy, deſtroy, as hath been ſaid, digeſtion, and the offices of the bile; and when thoſe functions are diſordered, the baſis of the animal œconomy is reverſed, ſleep diſappears, health declines, and the door is opened to all chronical diſeaſes.

Sect. 28.

We may range under the article of ſecretions the pleaſures of love; and here all the advantages remain with the ſon of nature: brought up under the eyes of his father and mother, accuſtomed to continual action, unknown to the anxiety of idleneſs, ſheltered from dangerous diſcourſes, far from alluring objects, he feels no deſires till arrived at maturity; when exceſs of health awakens in him a ſenſation which nature hath given even to the brutes, to ſtimulate him to propagate his likeneſs as ſoon as he hath acquired maturity: his deſires have not that impetuoſity, which is oftener the effect of imagination than neceſſity — he wants opportunities — hence the pleaſure with him goes no farther than what nature requires †, and he

* See our author on the Diſeaſes of Sedentary People.

† If the contrary ſometimes happens, as I have known it, it is chiefly with young married men of a delicate conſtitution, or whoſe wives are more vigorous than they; they ſoon run themſelves out, and fall into a declining ſtate of health, with cough and fever, which often ends in a conſumption. *T.*

encreaſes

encreaſes his health even while he exhauſts it: but with the youth of the town, who finds himſelf in circumſtances abſolutely different, debauchery advancing age by force, is the general cauſe of his diſeaſes, and of his periſhing in the flower of his age.

Sect. 29.

Dreſs, deſigned to favour perſpiration, is among people of faſhion one cauſe of the badneſs of their health, and is detrimental many ways.

In the firſt place, it has commonly the effect of a bandage, which, if it is not general, acts at leaſt upon the principal veſſels; narrow ſhoes to confine the feet, bandages under the hams, at the lower belly, at the arm pits, at the neck, at the wriſts, at every part where the circulation of the blood ought to be free.

We know how deſtructive ſtays are both to ſhape and health *. The ſtomach and inteſtines always confined, and conſtantly conſtrained in the performance of their offices, engenders diſeaſes, digeſtion is loſt, the bowels clogged, the humours diſordered, the ſymptoms end in the green ſickneſs and corrupted humours, the acids prevail, nutrition ceaſes; the bones grow weak, and are often put out of form, from the age of ten to eighteen. So that the very means deſigned to make fine ſhapes, are the cauſes of deformity.

Another inconvenience attending faſhionable dreſs, is, that thoſe parts which require the moſt covering, have the leaſt: The ladies have their

* Vide Comparative View of the State and Faculties of Man, page 36.

breaſt

breaſt and neck covered, or quite bare, alternately; the men always cloſely inveſted, admit no air to enter but preciſely at the middle of the breaſt. Each the moſt certain method to endanger thoſe eſſential parts. The peaſant is never confined, but always buttoned; his wife and children know not the uſe of ſtays, and their breaſt is covered at all times alike.

Sect. 30.

The pores of the head always ſhut by a fat and mealy gum, ſometimes thoſe of the face *

* One ſhould reaſonably imagine, that the many melancholy inſtances we have of the fatal effects of painting the face and neck, would effectually deter the fair-ſex from the continuing ſo deteſtable a practice; if they have no regard for their health, which is thereby viſibly impaired, they ought at leaſt to conſider their beauty, which, while they think to improve, they in reality injure in ſo far, that when once a lady has uſed paint for any time, ſhe is obliged to continue it, from the injury her ſkin and colour have ſuſtained, as ſhe will viſibly perceive on conſulting her glaſs in the morning before her complexion is repaired for the day.

The injuries ariſing to the health from this practice may be conſidered under two heads, as ariſing from obſtructed perſpiration, which muſt be the conſequence, if the pores of the ſkin are filled up with ſuch compoſitions as are commonly uſed; and 2dly, as ariſing from the introduction of noxious particles into the body; moſt of the beautifying lotions, whatever may be advertiſed to the contrary, have mercury in their compoſition, and it is a certain fact univerſally known, that mercury applied to the ſurface of the body is as effectual in raiſing a ſalivation as when taken by the mouth: There have been inſtances where mercurial applications to remove blemiſhes from the face, have produced a ſalivation and all its diſagreeable conſequences: looſe and ſpoilt teeth, rotten gums, and offenſive breath. 'Tis true, our fair country-women are as yet ſtrangers to this in compariſon with thoſe of other nations; but though they are the moſt inexcuſable of any, on account of their naturally good ſkins and complexions, yet they are faſt following the example of their neighbours, and if they go on, will ſoon loſe that native beauty and innocence which has hitherto diſtinguiſhed them from others:——but I would hope the contrary.

by

by pomatum filled with pernicious particles, of which M. *Des Hayes* hath made the dangers known, are again the cauſe of damage by preventing perſpiration, which being retained, flies to the neighbouring organs, and produces a variety of maladies *.

The head unequally covered, ſometimes much, ſometimes not at all, is dangerous; the ſmalleſt cauſes greatly affecting people of great ſenſibility and delicacy.

The frequent uſe of fans is even dangerous, it is long ſince an able phyſician aſſerted, that in ſtopping the perſpiration of the face, they render the head hot, and heavy †. I think it the occaſion of ſo many bad eyes, ſore noſes, teethachs, and pimply eruptions.

Sect. 31.

Secretion of milk is another cauſe of diſorder among ladies of faſhion: when they do not ſuckle their offspring, the milk overflows, and cauſes infinite complaints, very grievous and hard to conquer ‡; among which is one extremly dreadful, becauſe it immediately im-

* Vid. § 7.

† Plempius de togator. Valetudin. page 34. *T.*

‡ "A woman in this caſe," ſays a very ingenious author, "runs an immediate riſk of her life by a milky fever, beſides "the danger of ſwelling and impoſthumes of the breaſts, "and ſuch obſtructions in them as lay the foundation of a "future cancer," Comparative View, page 26. And again "another great inconveniency attending the neglect of nurſing, "is, the depriving women of that interval of reſpite and eaſe "which nature intended for them betwixt child-bearing; a "woman who does not nurſe, has naturally a child every "year, this quickly exhauſts the conſtitution, and brings on "the infirmities of old age before their time, and as this ne"glect is moſt frequent among women of faſhion, the delica"cy of their conſtitutions is particularly unable to ſuſtain ſuch "a violence to nature." Page 27.

pedes

pedes population, and which none have mentioned before; it is a ſpecies of palſy in the uterus, followed by a fluor albus which renders them inſenſible to the pleaſures, and unfit for the purpoſes of generation. In the ſame manner flowing upon the inteſtines, it ſometimes occaſions a *diarrhœa* without being felt. If they ſuckle without the attention requiſite in this new ſituation, they are exhauſted, and fall into a diſorder of the nerves.

Sect. 32.

The abuſe of tobacco for ſome years paſt, is no more an error confined to the great, it appertains equally to all orders; it is at preſent more uſed in the anti-chamber than in the parlour, and much more ſo in paltry public houſes, than in convivial aſſemblies of the great *. But the uſe of perfumes, as well in powders as liquids, is a branch of luxury of the toilets only, attended with very bad conſequences, in continually irritating the nervous ſyſtem, and that ſo forcibly in ſome perſons, that it weakens them exceedingly, if they are obliged to ſuſtain it long. There are thoſe of the muſcadine kind which produce this effect with more certainty than the others: but all, let them be what they will, are truly pernicious, and ſhould be abſolutely baniſhed. Offenſive ſmells alone ſhould be perfumed, ſays *Martial*, ſixteen hundred years ago. I don't know if he reformed the citizens of Rome, but if the abuſe then ceaſed, it has revived conſiderably. A good

* For Mr. Tiſſot's ſentiments on this head, I ſhall refer the reader to § 77 and 78 of his treatiſe on the Diſeaſes of Sedentary People.

reaſon why the cuſtom ſhould be abandoned by all ſuch as have good conſtitutions, is, that it is uſeful only to ſuch as are diſgraced by nature, and who are obliged to conceal, with perfumes, the diſagreeable odours with which they have the misfortune to be infected.

ARTICLE

ARTICLE VIII.

Disorders moſt frequent in People of Faſhion.

Sect. 33.

I HAVE in haſte gone through the principal differences obſervable between the man of faſhion and the labourer's manner of living, but ſhall particularly point out the diſeaſes generally reſulting from the continuation of thoſe cauſes. I muſt premiſe that thoſe cauſes having once acted upon a firſt generation, their children are weaker than themſelves, and luxury and effeminacy having preſided over their education, thoſe ſeeds of evil which were born with them are daily augmented; the progeny are therefore ſtill weaker than the parents, and the evil is progreſſive from age to age. There is a country where the courtiers are known by the meanneſs of their ſhape.

Our fathers, leſs ſtrong than our grandfathers were,
Are ſucceeded by us who are weaker by far.

Sect. 34.

If the education of the man of faſhion was the ſame as the labourer's, if his ſtrength was an

object of care from his infancy, he would be better able on his entrance into the world to ſuſtain the ſhocks he muſt try; but through a ſhameful abuſe they begin to ruin his health the moment he ſees the light *: ſo there remains but little to make him effectually loſe it, when there is an opportunity, and he is ſoon expoſed to infirmities, the conſequence of a life of luxury and diſſipation, of which the chief effects are generally a total loſs of digeſtion, an univerſal diſorder of the nerves, with all the concomitant maladies, obſtructions, a ſharp principle in the humours, and an habitual diſpoſition to be feveriſh from theſe general effects, operating upon the different organs, many diſeaſes proceed. I ſhall briefly mention the chief and moſt common.

Sect. 35.

The firſt, though not one of the moſt dangerous, but of the moſt inconvenient, is that ſenſibility to every impreſſion of the atmoſphere which makes its leaſt ſenſible changes troubleſome. The weak man in the remoteſt part of his alcove imagines the north wind rages; want of ſleep, a general uneaſineſs, and univerſal anxiety ſeize him; while his huſbandman, who hath already been ſeveral hours in the open air, is at a loſs to gueſs what is the matter with him: fogs give him the vapours, rainy weather oppreſſes him, takes away his appetite, enervates and makes him miſerable; cold weather makes him cough, gives him the cholic, and cauſes him to ſpit blood. In women it occaſions ob-

* The reader will find a very elegant and full illuſtration of what is only hinted at here, by conſulting the Comparative View, § 1.

ſtructions,

ſtructions, renders them iraſcible, paſſionate, and irkſome to themſelves. We call to mind that the chancellor *de Chiverni* predicted to the preſident *de Thouſ*, that if the Duke of *Guiſe* provoked the ſpirit of *Henry* III. during the froſt, which rendered him almoſt furious, he would diſpatch him without the form of law.

M. Boyle hath preſerved the hiſtory of a lady of the court of London, whoſe ſenſations were ſo fine that ſhe could at once judge if thoſe who came to her had paſſed through any place where there had been any quantity of ſnow. In approaching her they cauſed her to ſuffer; her nerves were affected by the few nitrous particles with which their cloaths might be tinged, and which the heat of the room cauſes to evaporate and fly to any thing near. An obſervation which proves what the author of a very intereſting new work has attempted to eſtabliſh: that is, that the particles with which the air abounds in its different changes, greatly contribute to what valetudinarians ſuffer at thoſe various times *.

Mental delicacy is ſometimes not leſs predominant, and I have often ſeen a woman of wit and ſenſe but too ſuſceptible of ſuch ſenſations—who could not bear people to come near her whoſe countenances did not pleaſe her, without feeling herſelf remarkably uneaſy, which had a great influence on her pulſe.

Sect. 36.

Head-achs are a diſeaſe too common among people of faſhion; they are in general the con-

* Mr. l'Abbé Richard, hiſtoire naturelle de l'air & des meteores. *T.*

ſequence of ſome diſorder in the ſtomach or nerves, often of both: it is a diſorder the more grievous, as, beſides its violence, which is ſometimes exceſſive if it often happens, and the intervals between the fits are but ſhort, it renders the whole nervous ſyſtem ſo unfortunately delicate as to admit of hardly any relief: and in fine, after having endured it many years, if it ſhould be diſplaced, it expoſes them to diſorders more grievous than the moſt cruel headachs themſelves.

I have ſeen palſies, convulſions, aſthmas, pains in the ſtomach, and ſtrong dyſenteries ſucceed the diſappearing of this complaint.

Sect. 37.

A great tenderneſs in the eyes, pains in the bottom of the ball, an impoſſibility of opening them in the morning; a light gum on the eyelids, a too great facility in ſhedding tears; an inability to read long, or do any other trying buſineſs, are likewiſe the conſequences of that principle of heat and ſenſibility that are always found under various forms among thoſe perſons whoſe conſtitutions I am at preſent conſidering, and are perhaps encreaſed by the great light of their chambers, by the glaſſes and their reflections, and by the ſmoke of a number of wax lights.

Sect. 38.

Another effect leſs conſiderable in itſelf, if we are not attentive to it, but a ſource of evils by the uneaſineſs it gives, or by means of the remedies

remedies taken to get rid of it, are the pimples which come in the face.

They are cauſed by that ſharp principle in the humours, and that irregularity in perſpiration, which are the appendages of perſons of this claſs. It is this two-fold principle which likewiſe hatches thoſe multitudes of tetters, not only in the face but all over the body, which are more common with perſons in high life than others.

Sect. 39.

The itch, which is moſt commonly a contagious diſorder diſperſed by want of neatneſs, is frequent among the lower claſs of people and mechanics, but rarely found with the opulent: but tetters, leaſt known among the poor, whoſe blood is naturally ſweet, and who have the itch only by infection, are frequent with people of a higher claſs, but who carry in their blood, overloaded with ſharp humours, a principle of eruptive diſeaſes, always ready to manifeſt itſelf in different appearances, which ſometimes flies back from the ſkin to the internal organs: at other times it encroaches upon the internal organs without being firſt externally obvious, producing pains in the head, coughs, aſthmas, convulſions, reachings, cholics, diarrhœas, and a number of other diſeaſes, oftentimes badly treated, becauſe their real cauſes are not attended to.

The

The Gout *.

Sect 40.

The ſharp gouty humour, the fruit of bad digeſtions, irregular perſpirations, and often of inflamed blood, is another of thoſe diſeaſes peculiar to ſuch as eat at the table of voluptuouſneſs *, indulge in the pleaſures of love, late hours, inactivity, the paſſions, and ſtrong contentions of ſpirit and which is almoſt abſolutely unknown to the ruſtics.

Unhappily it paſſes from the parents who have deſerved it to their innocent offspring, and when it is once eſtabliſhed, it is difficult to eradicate.

When it is regular, from time to time it cauſes pains ſo intolerably accute, that we regret ever having done any thing to give them birth: but the greateſt evil of which it is productive, is when it cannot fix itſelf, or when it ſhifts about, in either caſe, by wandering in the maſs of humours, inflaming ſucceſſively different interior or exterior parts; it alternately produces pains, convulſions, palſies, anguiſh, fevers, cholics, obſtructions, the ſtone, ſwellings continual uneaſineſs, an habitual weakneſs of the legs, a privation of health, and conſequently of all other pleaſures: We cannot indeed taſte any when we no longer enjoy that ſenſation of health, which is the firſt in itſelf, and the foundation of all other pleaſures.

* Vide Dr. Cadogan on the Gout.

Diſorders

Diſorders of the Lungs.

Sect. 41.

The Lungs are thoſe organs which ſuffer the moſt from that ſharp and inflammatory diſpoſition of the maſs of blood. The humour which continually exhales from them, is the ſame as that which perſpires through the ſkin, the ſame acrimonious principle which is found in the latter, and occaſions the diſorders mentioned in §. 38, 39, inflames the interior membrane of the lungs, producing more grievous effects, becauſe their ſeat is in much more important organs. Here are engendered coughs, oppreſſions, aſthmas, and heats of the breaſt: If the external perſpiration happens to be ſtopt, and flows back upon the lungs, it is what is called a catarrh, or rheum, which equally attacks the interior parts of the noſtrils, the throat and the breaſt, and which often produces a real inflammation.

But of all the diſorders of which the kind of life I mention is productive in the lungs, one of the moſt common and moſt dangerous is, the tubercle; a name given to thoſe ſmall tumours, from the bigneſs of a pimple to that of a ſmall nut, more or leſs hard, which are produc'd in the lungs; at firſt ſmall, and few in number, but become larger and more numerous: Farther on I ſhall give their hiſtory, more fully: It ſufficeth to ſay in this place, they are rare among the lower claſs of people, and one of the moſt common cauſes of conſumptions in people of faſhion Juicy viands, ſtrong wines,

wines, or ſpirituous liquors, and incontinency, are three cauſes, which never fail to produce them when the lungs are weak. We find conſumptions in the peaſant as well as in people of faſhion; but in him they are the conſequence of the bad treatment of an inflammation in the breaſt, or of a catarrh too much neglected.

Diſorders of the Stomach and Bowels.

Sect. 42.

If we paſs from the organs which are contained in the breaſt, to thoſe encloſed in the lower belly, the ſtomach preſents itſelf firſt, whoſe functions are the moſt diſordered by that kind of life which characteriſes *good company*; loathing, irregular appetite, a mouth out of order, ſickneſs at heart, heart-burn, cramps or convulſions in the ſtomach, habitual reachings, thirſt, drought of the throat, are diſorders hardly known in the country, and which torment the citizen in proportion to his faſhionable pleaſures, his ſenſuality and luxury; while the huſbandman eating daily near the ſame quantity, the ſame kind of food, and at the ſame hours, never feels any diſorder at his ſtomach.

Sect. 43.

The actions of the inteſtines are, and muſt be, as much diſordered as thoſe of the ſtomach: a frequent uneaſineſs in the bowels, coſtiveneſs, dryneſs, continual windineſs, habitual cholics, and,

and, above all, the hæmorrhoids, diſorders as uncommon in the country as frequent in town, are the ſymptoms of which the perſons ſpoken of daily complain, and which conducts them by degrees to others more terrible.

OBSTRUCTIONS.

SECT. 44.

The other moſt common diſorders are, ſtoppages in the different inteſtines; above all of the liver, and meſentery, which are neceſſarily produced by too ſedentary a life and the paſſions, which directly incommode the ſecretions; and above all, the gall, which ſtagnates in its channels, grows thick, and even becomes hard, ſtopping them intirely, and ſometimes becomes real ſtones, which are more frequently found in the gall-bladder than in the liver, cauſing thoſe tormenting bilious cholics, dependant on the difficulty which theſe ſtones have to paſs from the gall-bladder into the bowels and which, if the cauſe is not deſtroyed, renders life extremely miſerable, bringing on a dangerous jaundice, and terminating in an incurable dropſy, which very much ſhortens exiſtence.

Of all the ſtoppages of the lower belly, that of the liver, and above all, that of its ſmall or ſuperior lobe, are the moſt frequent: But it appears to me, that that of the pylorus (the paſſage from the ſtomach to the inteſtines) and of the meſentery, are become more common than formerly, the natural conſequence of the encreaſe of diſorders in digeſtion. Nerves continually agitated,

agitated, affect the order of circulation; and the frequent ſwellings of the inteſtines, by compreſſing the veſſels, and often forcing the humours to ſtagnate, produce the ſame effect.

Theſe ſtoppages, joined to the ſharpneſs of the humours, give birth to thoſe ſmall fevers which ſo often viſit delicate perſons, which ceaſe for a time, by dieting and light evacuations, and afterwards yield no more, but inſenſibly deſtroy the patient.

The Stone.

Sect. 45.

The Stone in the bladder, is a diſeaſe rather peculiar to certain countries than certain orders of men, and I believe not more frequent among the rich than the poor, the gouty excepted, who are much leſs ſubject to the ſtone than to the gravel, by which they are tormented perhaps for ſeveral years, without its forming into large ſtones.

Sect 46.

Theſe are the diſeaſes which commonly attack the different parts; but there is another ſtill more common, more peculiar to people of faſhion, more evidently the effect of their manners, their paſſions, their regimen, and their manner of living, which is the

Diſorders of the NERVES.

Bad digeſtions, the imperfect nutrition which attends them, inactivity which prejudices all the ſecretions, are the cauſes that the matter of the animal ſpirits is not ſufficiently worked; watchings, irregular perſpiration, the ſharpneſs of aliments render them acrid, the functions of all the veſſels being badly executed, agitate them, the continual whirl of the paſſions confuſe them inceſſantly: It is therefore not at all ſurpriſing that their functions are not well performed, that their courſes are irregular, and that from thence ariſes that innumerable collection of diſorders, that vary in every ſubject, that vary from day to day in the ſame ſubject, and whoſe variations are undoubtedly not infinite, but certainly indefinite. To count them, we muſt take the number of the different parts of the body which have nerves, and which are conſiderable enough, on being injured, to produce a ſenſible effect, and calculate of how many combinations the number is ſuſceptible; the number which reſults from the operation, is the poſſible number. I do not ſay of the diſeaſes of the nerves, which may be reduced to a ſmall number of claſſes, but of nervous ſymptoms: Thoſe claſſes are, the palſy, or the ceſſation of action, ſpaſms, or an action too ſtrong and laſting on the ſame part; mobility, or too great facility of paſſing from a too violent action, to one which is too weak; or ſo ſtrong a ſenſibility, that the re-action of the nerves is always more than proportionate to the action of the impreſſions: It

is the ſymptoms of this laſt claſs which are the moſt frequent, and which renders miſerable the lives of many men, on whom fortune ſmiles, and who are only miſerable becauſe they find in their nerves an inſurmountable obſtacle to happineſs; the ſlighteſt impreſſion is to them a lively ſenſation; what their neighbours do not even perceive, ſtrongly affects them; that which is ſlightly diſagreeable to others, is to them exceſſively painful; with regard to their mind, whatever does not ſooth is excruciating; an unpleaſant idea gives them deſpair, and not being able to drive it away, it inceſſantly riſes on the mind, and renders them continually miſerable; whatever does not immediately tend to make them happy, is a cauſe of ſorrow; by the ſame rule, all who are about them give them pain, and they give pain to all about them; true felicity flies from them, and their hopes ever to enjoy it are but ſmall; their wiſhes and deſires have the ſame inſtability as their nerves; the objects of their imagination, of their appetites, of their paſſions, vary ſometimes every minute; fearing every thing, enjoying nothing with tranquillity; their life paſſes in fears and deſires, without any quiet poſſeſſion; while the happy huſbandman wiſhes for little, enjoys it quietly, and never fears any thing.

Sect. 47.

Beſides the diſeaſes of which I have ſpoken, and which may attack either ſex without diſtinction, the mode of life in queſtion renders ladies of faſhion more particularly ſubject to ſome, which are much leſs common in the country. I ſhall here mention only four, the irregularity

irregularity of the terms, miſcarriages, the bad conſequences of miſcarriages, and the white evacuations.

Irregular Terms.

Sect. 48.

That ſpecies of the green ſickneſs derived from the terms finding difficulty to eſtabliſh themſelves, is common enough in the country. We often ſee girls of eighteen or twenty years of age, who yet are without terms; there are natural reaſons peculiar to them: It is not the ſame with perſons who reſide in cities, and live a modiſh life, the courſes appear, and the young girls are mature much ſooner than in the country, ſometimes much too ſoon *; for thoſe early terms contribute oftentimes to weaken them for life, and ſow the ſeeds of all languiſhing diſorders, which are adduced from fibres too relaxed; the veſſels do not acquire the ſtrength they ought to have, and thereby the functions are never perfectly performed. But if with the country people the terms take place later, they operate more regularly; the uniformity of their lives eſtabliſh, in this reſpect, the beſt order, and that order contributes greatly to their health. It is not the ſame thing with ladies of faſhion, of whom many are ſubject

* There have been inſtances even in this country, of girls, of ten, nine, and even under ſeven years of age, who have had their monthly evacuations: but moſt of them, though ſeeming to enjoy good health, and married to healthy huſbands, have continued either altogether barren, or what is nearly the ſame, never brought their fruit to perfection.

to the moſt irregular menſes, and above all, of frequent ſtoppages without any apparent cauſe; ſometimes the ſuppreſſion continues for two or three months; ſometimes the returns are regular, but the quantity is ſenſibly diminiſhed. With others, on the contrary, the returns are too frequent, or the evacuations too copious; and all theſe caſes naturally proceed from the manner of living, and, above all, from the paſſions; always conducive of uneaſineſs, laſſitude, faintneſs, pains in the head, and obſtructions.

Sect. 49.

Not only the menſes are more irregular with perſons in high life, but they find them more troubleſome; and it is common to find in young perſons of this claſs thoſe violent cholics which precede each appearance of the terms, and which ſometimes turn to convulſions, which are rarely experienced by thoſe who reſide in the country, and to whom this period is not a time of uneaſineſs as with the others. We may therefore rank theſe menſtrual cholics among the diſeaſes of ladies of faſhion; they are likewiſe more expoſed to them, their mode of living ſubjecting them to obſtructions and diſorders of the nerves.

Miscarriages.

Sect. 50.

That weakneſs in the fibres of the uterus, which renders the evacuations ſo irregular muſt

must neceſſarily conduce to miſcarriages, for two reaſons; the firſt is, that the adherence of the after birth is much weaker, becauſe the power of adheſion between ſimilar bodies, is proportionate to their degree of denſity; the ſeparation is therefore much eaſier *. The ſecond is, the approach of the blood, ſo very irregularly made, is ſometimes ſo conſiderable, that it produces an hæmorrhage, of which a miſcarriage is almoſt always the conſequence—at other times it is ſo ſcarce that it is hardly ſufficient to nouriſh the child, who pines away. The ſecundines ſhare the ſame fate, and a ſeparation neceſſarily ſucceeds. We may add a third: the mobility of the nerves of women of faſhion, as I have ſaid, renders them ſuſceptable of fright; and frights are of all others the moſt frequent cauſes of abortion. We may perceive from this ſingle cauſe, how much more ſcarce it muſt be among the country people who fear nothing, than among ladies who fear every thing; which weakneſs hath occaſioned, and daily occaſions, many great families to be extinct.

Frequent miſcarriages greatly enfeeble women, becauſe they are generally accompanied by copious floodings, which exhauſt very much; and what moſt to be lamented is, that the firſt often paves the way for a ſecond, and that again for a third. I have ſeen a woman who

* Our author has already obſerved, that women of faſhion are ſubject to too copious evacuations and too frequent returns, hence the determination of the blood to the womb, in leſs than a fortnight, perhaps after conception, forces off the ovum before the after-birth can have acquired ſuch a degree of adheſion as to reſiſt its impetus: and indeed if we obſerve ſuch miſcarriages as do not happen in conſequence of external violence, we will find moſt of them to take place at the time when nature makes an effort to reſtore cuſtomary evacuations.

miſcarried twelve times at three months and never could go beyond that time.

The Conſequences of Labours.

Sect. 51.

If miſcarriages kill a great number of children in the moſt conſiderable houſes, bad labours kill many mothers, or at leaſt throw them into languiſhing diſorders, which greatly abridge their days, and make them barren after a firſt conception.

Theſe bad labours are commonly rendered ſo by a complication of a putrid fever, an inflammation of the uterus, diffuſion of the milk, and diſordered nerves, which are infinitely more rare in the country, where this concourſe of cauſes is not found, and where it is common to ſee women who have had a great number of children, without ever having been even obliged to take an ounce of manna: and if we read many diſſertations concerning the health of women of faſhion, we ſhall too often perceive the origin of their complaints proceed from a miſcarriage or from a bad labour *. Thoſe periods give a blow to their conſtitution which they cannot remedy.

* Among other errors which were formerly productive of much miſchief to in-lying women, we may reckon as not the leaſt, the hot ſtimulating cordials given to promote delivery, and even afterwards to bring out a copious ſweat, in which the poor woman was kept for at leaſt nine days: this practice is much dropt at preſent, and the recovery of in-lying women is both quicker and more perfect than before.

Sect. 52.

Among the bad conſequences of frequent labours, we much reckon the ravages made by the overflowing of the milk, a diſorder formerly ſo uncommon, that it is ſcarcely mentioned by authors who wrote forty years ago; but it is ſo common in cities at preſent, that it is become one of the principal objects of thoſe, who ſince then, have treated of the diſorders incident to women *. Without them we have nevertheleſs arrived at an explanation of its cauſes and phænomina in a ſatisfactory manner.

The change which pregnancy cauſes in the uterus, influences the whole machine, but principally the breaſts: they become tender, painful, ſwelled, hard with the milk; ſometimes in the firſt weeks of pregnancy, and at the end of that period, it is uncommon if there is not a certain quantity.

The ſecond, moſt commonly the third, ſometimes only the ſeventh or eighth day after delivery, it comes in greater abundance: and this operation is ſufficiently troubleſome to occaſion a fever, ſometimes very violent; and which, complicating with other cauſes, may become dangerous. If the milk depoſited in the breaſts is drawn out as often as full by the infant for whom nature deſigned it, it continues to abound, and nothing is to be feared from thoſe diſorders. It may flow during ſeveral years, and the only danger to which it expoſes any perſon is exhauſting them. The milk is formed of the chyle, and preſerves the greateſt part of what characterizes

* Levret l'art des accouchment, M. de la Motte, Aſtruc, Puzos, &c.

it;

it; therefore the nouriſhment of the child is taken from that of the mother, and if ſhe has not a good appetite while ſhe nouriſhes, ſhe muſt of neceſſity be exhauſted, which happens every day, and throws many women into a languid ſtate and a diſorder of the nerves.

But if the milk, which ſometimes appears to form in the veſſels before it is carried to the breaſts, is not depoſited there, or after it is, if it returns to the maſs of humours, it operates like a ſtrange body, which is incapable of aſſimilating with the blood *; it acts like any other irri-

* *Incapable of aſſimilating with the blood.*] The general diffuſion of the milk, its determination to particular organs (*depots laiteux*,) and large milky evacuations without it having ever appeared in the breaſts, would lead one to imagine that pregnancy produced ſuch a change on the veſſels, as enabled them to convert the chyle into milk without the intervention of the breaſts. To explain this action will be difficult, perhaps even impoſſible, but that is not a ſufficient cauſe for our rejecting it: may not we conjecture, and that too with ſome degree of probability, that tho' the milk was not obſerved in the breaſts, yet in reality it exiſted there, though in ſmall quantity; but not making its way by the proper excretories, it returned into the veſſels, where acting upon that part of the maſs to which it bore the greateſt analogy, viz the chyle, this by aſſimilation it rendered perfect milk: the firſt chyle, now transformed to milk, acts upon the next, and thus the greateſt part of the chyle is ſo changed as to become milk without ever having been carried to the breaſt. This explains very well all the diſorders produced by milk in women who never had the appearance of having any, which is not a rare caſe; thoſe diſorders frequently being of a moſt dangerous nature.

There are a good number of very curious experiments to be made upon this head; firſt, to fix and determine exactly the characters of milk and chyle, the reſemblances between which have been given, but not the differences; ſecondly, to know the effects of milk injected into the veſſels; one may this way produce artificial diffuſions of milk and obſerve the effects proceeding therefrom: perhaps we ſhould ſee milk fevers, excrementitious evacuations of the ſame kind, depoſites of milk, ſuppurations, convulſions, palſies, rottenneſs of the bones, luxations, and all the dreadful train of ſymptoms which ſometimes attend in-lying women. *T.*

tating

tating matter, and ſometimes produces a violent fever; other times it is more moderate, but never entirely ceaſes, until the blood hath got rid of this humour with which it cannot be allied, and which appears to act like a weak acid injection.

Sect. 53.

We may range under three claſſes the effects of this kind of milk thus diffuſed; either it remains in the veſſels; or it evacuates itſelf by ſome natural ſtrainer; or, laſtly, it fixes itſelf upon ſome internal or external part.

When it remains in the veſſels it cauſes a continual fever, which becomes an hectic fever, commonly accompanied by a huſking cough, and a dryneſs of the ſkin, much greater than is generally found in other hectic fevers, deſtroying all the functions, and leading to death.

Sect. 54.

The ways by which the milk is moſt commonly evacuated, are the uterus, ſtools and urine.

We often find that when the red diſcharges diminiſh they are replaced by thoſe which are white and abſolutely milky, which I mentioned before, § 31. as one of the dangers; another more frequent is, when they leave the common white evacuations.

Sect. 55.

The ſecond way by which the milk retires is the inteſtines. There is no phyſician or midwife, who has not frequently ſeen in labours, ſtools,

ſtools actually milky; ſometimes the milk ſeems in good condition, at other times a little changed.

I have ſeen ſeventy ſeven ſtools in twenty-four hours, which appeared to be abſolutely nothing but milk, the whole of which might amount to twenty four or twenty five pints *; the odour which exhaled from them was exactly like that of ſour milk; the following days this large evacuation, which prodigiouſly weakened the patient, and would have killed her if it had continued with the ſame violence, very conſiderably diminiſhed, but remained nevertheleſs above ſix weeks; and I have ſeen them often when leſs copious, continue much longer.

Sect. 56.

The urine is a third way by which the milk is evacuated oftentimes very abundantly: I have ſeen women who have continued to paſs it from time to time in this manner, above ſix months after their labour, and it is this way which weakens them the leaſt and is the leaſt dangerous.

Sect. 57.

It is more uncommon for the milk to evacuate by reaching than by ſtools: I have, nevertheleſs, ſometimes known it come in this way; and twice theſe puckings were the ſalutary criſis which drew the patient from the gates of death.

* *Pints.*] The French pint contains two lb. of liquids, and is equal to the Scots chopin or two Engliſh pints.

Sect.

SECT. 58.

The milk does not perſpire under its natural form as it comes from the uterus, with ſtools, urine, and vomits; but ſweating is nevertheleſs one of thoſe evacuations by which it is frequently diſſipated; at firſt, it is certain a copious perſpiration, at the end of a milk fever, is what may ſhelter the perſon afflicted, from the ravages cauſed by the milk, more than any thing elſe; and this ſweat, which comes on the firſt day of the labour, ſenſibly diminiſhes the fever, ſo far indeed, that it partly removes the cauſe: the truth of which, the ſmell and ſituation of the ſheets will not permit us to doubt; they often acquire, in drying, a redneſs, which evidently proves that they are tinged with a thicker humour than the ſimple common ſweat.

SECT. 59.

Sometimes the milk is carried back to the breaſts, which is the moſt favourable criſis. I have ſeen them full in about ſeven weeks, plentifully flowing, and all the accidents which the patient felt were thereby diſſipated. It has even returned after ſeveral months; and I have under my care, women in whom this alternate flowing of the milk, to and from the breaſts, and this languor, is maintained during a long time.

SECT. 60.

After theſe firſt periods of the labour are paſt, it ſometimes happens that when they have begun

begun to diminiſh this hectic milk fever, of which I ſpoke in § 54, (which is attended with ſo great a dryneſs) the ſkin moiſtens a little, and afterwards permits a ſufficient perſpiration, which is a favourable criſis, but never complete, and to whoſe aſſiſtance other aids muſt be called.

Sect. 61.

Sometimes nature tries this criſis and it does not operate, but only carries the milk to the ſkin, which occaſions thoſe diſorders called milky eruptions, that are diſguiſed under different forms, and fix in different parts; ſometimes like boils, which continually ſucceed each other, and other times like whitlows, which are a ſpecies of boils; ſometimes like tetters or the itch, and other times like runnings more or leſs copious, watery, or purulent; and many other diſorders which, whatever form they take, are often of very long continuance if not properly treated at firſt.

The diſorder ſometimes ſeems to ſleep, the patient believes it cured, but at the end of a few weeks it appears again with additional vigour and under a new form I was conſulted by a woman, who in the ſpace of three years had loſt, at different times, many nails, and ſometimes from the ſame finger with a great deal of pain; in calculating ſhe found that ſhe had loſt and renewed twenty three.

Sect. 62.

The third termination of the effuſive milk, is what they properly call ſtagnated milk *, which

* Depots laiteux.

M. *Puzos*,

M. *Puzoz*, to whom we owe an excellent French work concerning labours, firſt mentioned, with a juſt attention, and in the moſt ſatisfactory manner. The veſſels continually irritated by the milk, which ſeeks to diſengage itſelf, as when it is infected by gouty humours, the ſmall-pox the meaſles, the plague, &c. When the evacuation cannot be made by means of thoſe ſtrainers, of which I have ſpoken in the preceeding ſections, it will depoſite itſelf ſomewhere. As it often happens in an acute fever, nature depoſites the irritating humour on ſome organ; and this depoſition is good or bad according to the importance of the part on which it is made.

It is the ſame with the milky depoſits. We have ſeen that if this effuſion of milk does not ſeparate from the maſs of humours, it cauſes a fever productive of death; but if it depoſites itſelf upon ſome eſſential organ, ſuch as the brains or the lungs, as it ſometimes happens in the firſt ten or twelve days of the lying-in, the patient dies ſpeedily. After that period it ſeldom fixes upon thoſe organs. It then fixes either in ſome part of the lower belly, and principally the pelvis, or outwardly, and oftener upon the under extremities than elſewhere. I have ſeen it fix itſelf upon the myſentery, upon the ovarium, frequently at the bend of the thigh, ſometimes at its articulations, even in the intervals of the muſcles of the thigh which I have ſeen three times bigger than the common ſize, attended with acute pains upon the legs, upon the fat which ſurrounds the breaſt, on the arms, &c.

Sect. 63.

At the commencement of theſe lodgements or fixtures, the irritation being leſs general, the patient ſeems rather better, and the fever abates; but the obſtruction ſoon cauſes pains more or leſs acute, ſometimes atrocious, the depoſit not being complete, or a part thereof repaſſing into the maſs of the blood, again produces a fever to the full as ſtrong, and often attended with more dangerous ſymptoms than the firſt, and the patient falls into that ſtate which the moſt afflicting pains occaſion, the functions impeded by the tumour, the nervous ſyſtem diſordered, fever, and new lodgements from a part of the reabſorbed humours being carried to different parts, cauſe the moſt alarming ſymptoms, and often the moſt uncommon, of which hiſtory preſents a large detail, which does not belong to a work not deſigned for phyſicians, and of which the only end is to make known to the afflicted the diſorders to which their manner of living expoſes them.

Sect. 64.

Thoſe which I have deſcribed, the irregularity of the menſes, the effects of bad labours, the overflowing of the milk, diſorders as common among people of faſhion as rare in the country, are evidently derived from thoſe irregular ſecretions which we find are the effects of their manner of living; in that acrimonious principle and inflammatory diſpoſition, which always exiſts in their blood; in that maſs of hot ſubſtances which continually burns their entrails; in

in that mobility of the nervous ſyſtem which is always ready to incommode the functions and evacuations; and finally, in that continual fluctuation of the mind, which inceſſantly alters the ſtate of the body, theſe are the cauſes which ſo often render thoſe acute diſorders of perſons of this claſs ſo irregular, complicated, difficult and permanent.

Sect. 65.

The fluor albus is another diſorder almoſt unknown to the peaſant, but very common to women of rank *: their varieties, their numerous effects, and their different cauſes, does not come within my plan; I ſhall therefore confine myſelf to three general obſervations; one is, the almoſt continual lowneſs of ſpirits, weakneſs, melancholy diſpoſition, frequent ſenſation of anguiſh at the pit of the ſtomach, weight and weakneſs at the reins, loathing, paleneſs, leanneſs and eyes caſt down, are the common ſymptoms of this diſorder. The next is, that it may be dependant on the moſt oppoſite cauſes; that if it continues for any long time, it entirely ruins the health, and commonly produces all the diſorders of the nerves. In fine, if not timely remedied, it becomes very difficult to eradicate it. The third is, that of all the diſorders mentioned, it is this which is the moſt certain and moſt conſtant effect of that inflaming and cuſtomary mode of life, of which I have ſo often made the dangers known.

* Mr. Malouin obſerves, that this diſorder is more frequent in Paris than any where elſe.

ARTICLE IX.

REMEDIES.

SECT. 66.

AN infirm ſtate of health very oppoſite to that of happineſs, which renders life miſerable, and ſhortens its duration, which makes all uneaſy who are about us, deſtroys population, and infects the riſing generation with the ſeeds of languor and diſeaſes, is undoubtedly an object very worthy the attention of phyſicians; but ſuch attention ſolely will be found very inefficacious; it is not certain receipts which can remove the evil, but the concurrence of the patient is here of the utmoſt neceſſity; he muſt be ſenſible of his ſituation, and willing to be cured, and his will muſt be ſufficiently ſtrong to determine him to renounce the cauſes of his diſorder, by changing his mode of life; but that the propoſition may not alarm, and ſhock too much, I do not pretend to propoſe a reformation now become impoſſible, and which would conſequently be ridiculous.

I do not invite any to exiſt like the ſavages, who, for the generality, deliver themſelves up to an indolent ſtupidity, and ſcarce ever leave home, but to ſeek proviſions or ſatisfy reſentment; living after the manner of brutes, rather

ther than reaſonable beings; and are far from reſembling thoſe imaginary portraits drawn by romantic, and perhaps miſanthropical travellers; which are intended rather to humble the civilized, than exalt the ſavage. Or they perhaps thought to acquire a greater degree of importance, by raiſing the merits of thoſe among whom they lived, or finally, who miſtook for a national character, ſome peculiar beauties which could prove nothing in favour of the generality.

Neither do I mean to call the polite to the life of a labourer, though I believe the labourer is happier in that life than the man of faſhion in his mode of living. But two very inchanting claſſes of pleaſure, thoſe which have their ſource in the cultivation of the mind, and ſentimental exerciſes, are almoſt loſt to him, which powerfully concur to encreaſe the felicity of the man who enjoys them. If therefore, the man of faſhion, who can procure them, is leſs happy than the villager, it is his own fault; for naturally he muſt have the advantage. But he is ſo unlucky, that in rearing the edifice of his faſhionable pleaſures, he lays the foundation of his pains.

Sect. 67.

The firſt change which we can propoſe for the amendment of his conſtitution, ſhould therefore be an attention to thoſe two claſſes of enjoyment which are in his power, and which ought to be the objects of ſuch as have the care of his education; the great end of which is to make known to man the true ſources of his happineſs, and the ways conducive to it.

Great qualifications, great virtues, agreeable

ſociety, the charms of wit, and beauty, in the natural order of things, are found with the beſt educated. But talents, virtues, agreeable qualifications, and ſhining charms, are all deſtroyed by a bad ſtate of health.

" All he may claim, and boaſt the art to pleaſe,
" But nought enjoys, while tortur'd by diſeaſe."
M. de VOLTAIRE.

Reaſon itſelf is often rendered uſeleſs by a bad conſtitution.

Oh! ſay, can reaſon rule a weakly frame,
And the wild fury of diſorder tame;
Reaſon is like, thus aiming to control,
A ſkilful driver on his chariot's pole,
Who drives a craz'd machine, without a brace,
Or wheel, to aid him in his lagging pace:
Or like a pilot, who a veſſel guides
Without a rudder, through the foaming tides;
For in affliction fancy cannot roam,
But chain'd by ſickneſs, is confin'd to home.
Epiſtle to MONTULE.

Nerves continually agitated by humours, which are always irritative, by diſordering the harmony of the organs, and enfeebling the body, murder the mental faculties; which are ſo much dependant on the ſituation of its ſurrounding body, that whatever diſorders the œconomy of the one, abſolutely prejudices the mode of thinking in the other.

" That bright'ning ray, by God himſelf beſtow'd,
" Blends with our ſenſes, and like them grows weak."

And this obſervation, confirmed by the experience of ages, gives to all the ſalutary law of being

being carefully awake to the preſervation of health; but this law acquires a greater degree of ſtrength, in proportion as we fill up a more neceſſary ſtation, and in which we believe ourſelves to be of more importance.

Sect. 68.

Another change upon which we muſt of neceſſity confine ourſelves to a general definition, or enter into an endleſs detail, is to take away entirely, thoſe things which ſhorten exiſtence, without, in the leaſt, encreaſing happineſs; to know preciſely the pleaſures of faſhion, and fallacious cuſtom; and to diſtinguiſh them from thoſe pleaſures which are real; not to riſk being always ſubjected to actual inconveniencies, in order, for a moment, to avoid theſe which are trifling; and finally, to learn to reckon, and balance thoſe imaginary pleaſures which bear the name without being ſo, and in the flurry of which we cannot help yawning out, "'tis very amuſing." Pleaſure enters into the eternal order of things, it exiſts invariably; to form it, there muſt be certain connective conditions in the object who enjoys, and him who beſtows; thoſe conditions are not arbitrary, nature hath pointed them out; the imagination diſorders though it cannot create them, and the moſt ſenſual libertine cannot ſucceed better in augmenting his enjoyments, than by renouncing them to ſuch as do not carry this mark of nature.

Sect. 69.

I do not propoſe to a man who dwells in the middle of a city, (and if cities are evils, there can

can be no concluſion drawn) who has too long a journey to make, ere he can breathe the air of the country, and who knows not how to employ himſelf there, to paſs too much time in the country; but I would perſuade him, that the open air is not ſo hurtful to him, as to oblige him to go out in a gently moving, and cloſely ſhut houſe. I would not have him believe that the pavement will wound his feet, that the common jolting of a carriage will do him a deal of harm, and that by going ſo very ſoftly, he deprives himſelf of the only motion which the neceſſity of purſuing pleaſure affords him.

Firſt, in renouncing air and exerciſe, he ruins his health; but what is more, by ſeeking to diſpenſe with whatever does not agreeable impreſs him, he gains nothing; for by that means, his ſenſibility continually encreaſes; the ſlighteſt impreſſions augment their ſtrength in proportion; and now, have at laſt, as diſagreeable an effect as the ſtrongeſt had before; he begins to dread every thing, though he cannot avoid all; hence he becomes a pitious ſpectacle. Little cauſes much ſooner affect a delicate conſtitution, than great ones do a ſtrong: the more we aim to avoid the impreſſion of thoſe agents with which nature hath ſurrounded us, and to whoſe agency ſhe hath thought proper to expoſe us, becauſe neceſſary to our conſtitution, the more we are incommoded thereby. The Sybarites drove the cocks from their town, for preventing them from ſleeping, and then the leaf of a roſe would wake them. When we accuſtom ourſelves to travel in carriages as eaſy as beds, we can no longer ſerenely ſlumber in an alcove: and he who avoids the open air, and dares not leave his chamber when the north wind blows, will ſoon find his bed itſelf uneaſy, and will be offended

even

even at his friend, who, in opening the door, cauſes a frozen current to aſſault his legs. It has been ſaid with juſtice, that "Effeminacy "encreaſes itſelf; when to day we imagine we "are incommoded by that which incommodes "no body, we ſhall to morrow be incommod-"ed by that which to-day is no inconveniency; "at laſt we ſhall find none but painful ſitua-"tions; the new precautions we impoſe are "new afflictions prepared, and we are always "miſerable, becauſe, while wiſhing has no "end, happineſs has no beginning."

Sect. 70.

I do not think it neceſſary to go to bed with the ſun in order to do well: I would not have ſociety conclude, that the moment the convivial perſon occupied during the day, has leiſure to begin to enjoy it. He ſhould not.—We may without danger keep awake ſome of thoſe hours which the huſbandman, fatigued with hard labour, ſleeps away. But I would not have the man of faſhion think that he cannot be happy without breaking through the order of nature, and turning night into day; that he will not think it beneath him to allow the ſame luminary to light him which lights the univerſe; that he will not imagine that no pleaſures are awake to him but when the reſt of the world ſleeps; that he will not chuſe for his favourite hours that which the ruffian, who deſires to be unknown, chuſes; or like the ferocious brute, who attacks his prey in the darkeſt ſhades. Pleaſure is of all hours, and it is not neceſſary to his amuſement that the ſun ſhould have finiſhed his journey: to think, or appear to think otherwiſe, is to be diſtinguiſhed by

by a littleneſs of thought. Pleaſure is much more agreeable, and we enjoy it longer, when taken in thoſe hours which detriment health the leaſt; and it cannot be too much inſiſted on, that it is not equal to ſtay up late in order to riſe late; ſuch habit deprives us of the enjoyment of the pure air, and reduces us to the neceſſity of breathing the ſmothered air of a bed, during the greateſt part of the day, and confines us at night to inhale the air of rooms, crowded with people, and full of lights, which is neceſſarily unhealthy. Without ſtriking at the exiſtence of pleaſures, let us only time them properly, and walk in the path deſigned by nature, and we ſhall certainly be gainers.

Sect. 71.

I would not reduce the opulent to live upon brown bread, lettuce, and cabbages; ſuch food requires organs fortified by exerciſe and open air. The town air, much thicker than that of the country, renders the appetite leſs craving, and is of leſs ſervice to digeſtion. It cauſes a neceſſity for lighter and more ſavoury foods than that which ſatisfies the hardy workman. The inactivity of the rich does not permit them to live upon bacon, beans, and peaſe: ſuch viands would corrupt in the ſtomach, and occaſion many diſorders. I would not therefore wiſh to reſtrain them to the ſame regimen as men whoſe mode of life is ſo different. It is neceſſary there ſhould be a ſpecific difference in their food: but between the groſs aliments of the labourer, and the heating foods, and ſauces of the opulent, a juſt mean compatible with health may be preſerved, and unite lightneſs, delicacy,

delicacy, and an agreeable reliſh. Here we may again mention the obſervation before made, relative to the air, that is, the more we purſue exquiſite ſenſations, the farther we are from attaining our end; the organs become hard to pleaſe by frequent uſe. Simplicity alone can aſſure a conſtant taſte of pleaſure. The water-drinker always reliſhes it; he who drinks the moſt delicious wines will always deſire new ones. The organs always inflamed by foods and ſharp liquids, become callous, the ſenſations grow dull; thence comes the indifference for every thing which is not delicious, or uncommon; thence the neceſſity of nouriſhing with meats and drinks that are hurtful, and even ſometimes in the end an impoſſibility of taking any nouriſhment; for the conſequence of this mode of life being often a total loathing, from which a more ſimple manner of living is a ſecurity, a manner of living which even the moſt voluptuous ought to embrace: the whole depends on calculation. I have ſaid we do not calculate enough. In conſidering the matter a little more, we ſhould all encreaſe the ſum of our happy moments, and ſociety in general be the gainers.

Sect. 72.

The danger of the paſſions has been diſplayed: I ſhall not here mention the practical part of that article, which is no longer in my province: the politician may uſe, and the moraliſt correct, but the phyſician is confined to obſerve only their influence upon health, and to reform the pernicious effects. Unhappily this is very difficult; above all as long as the cauſe ſubſiſts, we cannot extinguiſh a fire in the midſt of a ſtorm; we cannot ſecure a ſhip in a tempeſtuous

by a littleneſs of thought. Pleaſure is much more agreeable, and we enjoy it longer, when taken in thoſe hours which detriment health the leaſt; and it cannot be too much inſiſted on, that it is not equal to ſtay up late in order to riſe late; ſuch habit deprives us of the enjoyment of the pure air, and reduces us to the neceſſity of breathing the ſmothered air of a bed, during the greateſt part of the day, and confines us at night to inhale the air of rooms, crowded with people, and full of lights, which is neceſſarily unhealthy. Without ſtriking at the exiſtence of pleaſures, let us only time them properly, and walk in the path deſigned by nature, and we ſhall certainly be gainers.

Sect. 71.

I would not reduce the opulent to live upon brown bread, lettuce, and cabbages; ſuch food requires organs fortified by exerciſe and open air. The town air, much thicker than that of the country, renders the appetite leſs craving, and is of leſs ſervice to digeſtion. It cauſes a neceſſity for lighter and more ſavoury foods than that which ſatisfies the hardy workman. The inactivity of the rich does not permit them to live upon bacon, beans, and peaſe: ſuch viands would corrupt in the ſtomach, and occaſion many diſorders. I would not therefore wiſh to reſtrain them to the ſame regimen as men whoſe mode of life is ſo different. It is neceſſary there ſhould be a ſpecific difference in their food: but between the groſs aliments of the labourer, and the heating foods, and ſauces of the opulent, a juſt mean compatible with health may be preſerved, and unite lightneſs, delicacy,

delicacy, and an agreeable reliſh. Here we may again mention the obſervation before made, relative to the air, that is, the more we purſue exquiſite ſenſations, the farther we are from attaining our end; the organs become hard to pleaſe by frequent uſe. Simplicity alone can aſſure a conſtant taſte of pleaſure. The water-drinker always reliſhes it; he who drinks the moſt delicious wines will always deſire new ones. The organs always inflamed by foods and ſharp liquids, become callous, the ſenſations grow dull; thence comes the indifference for every thing which is not delicious, or uncommon; thence the neceſſity of nouriſhing with meats and drinks that are hurtful, and even ſometimes in the end an impoſſibility of taking any nouriſhment; for the conſequence of this mode of life being often a total loathing, from which a more ſimple manner of living is a ſecurity, a manner of living which even the moſt voluptuous ought to embrace: the whole depends on calculation. I have ſaid we do not calculate enough. In conſidering the matter a little more, we ſhould all encreaſe the ſum of our happy moments, and ſociety in general be the gainers.

Sect. 72.

The danger of the paſſions has been diſplayed: I ſhall not here mention the practical part of that article, which is no longer in my province: the politician may uſe, and the moraliſt correct, but the phyſician is confined to obſerve only their influence upon health, and to reform the pernicious effects. Unhappily this is very difficult; above all, as long as the cauſe ſubſiſts, we cannot extinguiſh a fire in the midſt of a ſtorm; we cannot ſecure a ſhip in a tempeſtuous

tuous ſea; nor can the abilities of the pilot prevent her dragging her anchors: but a conflagration is leſs violent, if there are leſs bituminous and dry materials; the tempeſt is leſs to be dreaded if the body of the ſhip is firm and well conſtructed. It is the ſame with man, whoſe ſituation is ſuch as renders him liable to be agitated by paſſions.

If ſuch a ſituation is neceſſary to exiſt, he is much leſs affected, if his conſtitution is firm and robuſt, his fibres ſtrong, his humours ſweet, and his nerves in good order. The paſſions are ſtill leſs detrimental to him, whoſe regimen is regular: he ſhall farther find himſelf in the ſame predicament, and be much leſs affected by his paſſions, becauſe the paſſions are only a lively ſenſation, and the vivacity of the affections depends on the ſenſibility of the nervous ſyſtem. Him in whom this ſenſibility is diſordered, is too much affected by trifles. That which would be only an ordinary or indifferent event if he enjoyed good health, ſeems to him conſiderable and alarming.

Sect. 73.

The man deſtined to paſs his days in the heart of large towns or cities, and employed in affairs of importance, cannot move about ſo much as him who reſides in the country. He frequently finds that his ſedentary manner of living is detrimental to him, and perceives the danger without the power to ſhun it—he is more to be pitied than blamed. But it baffles comprehenſion, to find that many people, entirely diſengaged, whoſe lazineſs alone is blameable, whoſe only buſineſs is diſſipation, and who cannot be ignorant of the advantages and neceſſity

neceſſity of exerciſe, are arrived to ſuch a degree of indolence, that they not only renounce, but fear it; and by that means, deprive themſelves of the moſt agreeable and ſure way of diminiſhing the danger of many ills which their conduct produces: It is the moſt certain preſerver of health and ſtrength: and all perſons who have time to employ themſelves as they pleaſe, ſhould lay it down as a rule, to exerciſe themſelves every day, at leaſt two hours, in walking or riding, in a coach, or on horſeback, which is the moſt ſalutary. It were to be wiſhed that young ladies in polite life were taught to ride, and that an academy in every large town was appropriated to inſtruct them in that art, the ſame as the men. Not only their health, but their external charms would thereby receive advantage.

Sect. 74.

Diſorders of the ſecretions depend on the other errors of the regimen. They operate more perfectly in proportion as fewer of theſe errors are committed; and when a purer air is breathed, when the aliments are wholſomer, when the exerciſe is more, the ſleep better, and the paſſions have leſs influence, the regularity of the evacuations is conſequently re-eſtabliſhed. Their route is the barometer of health, which is very ſenſibly affected by their order or irregularity. I have therefore nothing more in particular to ſay; and, after theſe general obſervations on the mode of life beſt calculated to ſecure health, I ſhall proceed to thoſe methods which ſeem the moſt probable to re-eſtabliſh it when diſordered.

ARTICLE X.

General Methods of Cure for the principal Diſorders.

Sect. 75.

THAT delicate habit, before defined, being the ſource of diſorders among people of faſhion, and common to moſt, ſhould be the firſt object of conſideration to phyſicians. They would be leſs ſubject to diſeaſes, if they could get rid of that facility with which they receive every impreſſion, which is the characteriſtick of that delicacy: to conſider which, is at preſent an object of importance.

Sect. 76.

It principally depends on three cauſes already mentioned, a weak fibre, a too great nervous ſenſibility, and a perſpiration too ſuſceptible of change. And as it frequently happens that the two laſt are the conſequences of the firſt, the beſt method of treating it is to ſtrengthen the fibres. I only ſpeak of caſes in which delicacy is the principal object, and not the effects of a languiſhing diſeaſe, which, when of long duration, produces the ſame effects.

Sect.

Sect. 77.

As the ſeed of this delicacy ſometimes exiſts from the birth, it ſhould be the care of educatio to eradicate it: the facts which this important article would ſupply might fill a volume. They ſhall here be reduced to a few general rules, which are the ſame as found in many treatiſes on this ſubject, but which it may be neceſſary now and then to call to mind. As the ancients are not ſo frequently read, the advantage of modern works, which do not contain a ſingle idea that is new, is to place before us uſeful truths that have been forgotten.

Sect. 78.

The methods that experience hath taught us are proper to ſtrengthen children, who appear to have been born weak, are the following:

1. They ſhould have a healthy nurſe *; with a good breaſt of milk, that the milk itſelf may be ſufficient nouriſhment for a year at leaſt. When that is not practicable, and there is a neceſſity of uſing other nutriment, it ſhould be given with an equal quantity of milk, which undoubtedly is the moſt proper aliment to give ſtrength and perfect health to the moſt delicate infant.

2. While the child is fed from the breaſt it may be allowed to take as much as it will, or as it can have; but with reſpect to other food, moderation muſt be uſed, that a habit of over-

* The mother, if poſſible, both for her own ſake, and that of her child; and that the child be put to the breaſt as ſoon as poſſible.

gorging may not be contracted. A good digeſtion is indiſpenſibly neceſſary to communicate ſtrength, and the only ſtrengthening remedies are ſuch as eſtabliſh it: but after all, in a delicate child it never can be perfect without an abſtemious regimen, to which too much attention cannot be paid; which if known, or properly noticed by thoſe who have the care of children's education, they would ſoon be convinced of its good effects. To which end let them but compare the eaſe, activity, vivacity, ſpirits, ſtrength, and ſweet ſleep, enjoyed after a moderate meal, with the anxiety, dullneſs, laſſitude, ill-humour, weakneſs, and troubled ſlumbers that follow repletion, and it will be eaſy to conjecture what effect a repetition of the latter courſe muſt have on the health. But what is ſtill worſe, is its equally affecting the mental faculties: in the uneaſy ſituation which an overloaded ſtamach occaſions, the faculties are clouded, they comprehend badly, devoid of retention, incapable of application; they dread and diſreliſh ſtudy, the nerves diſagreeably affected are incapable of receiving ſoft impreſſions; all ſeems painful, all agitates, the affections grow callous, the ſoul is ſhut to virtue, and the heart to tender ſenſations, which join with eaſe, and rapidly breed in the healthy and abſtemious child, who is diſpoſed to receive every happy ſenſation.

3. There is not leſs attention to be paid to the quality than quantity of aliments.

Cow's milk, when not inclined to obſtruct or bind too much, is one of the beſt; it has, nevertheleſs, an inconveniency, but it is eaſy to prevent it; that is, when the child lives too long upon it without any other food, a relaxation and weakneſs of the bowels is brought on

on, which ſometimes continues even for years.

Grain, above all rice, wheat, maize freſh ground, pulſe, principally all tender and delicate roots, panada made with hard baked bread, a little ſuccory, porridge or broth, are next to milk the moſt nouriſhing things: they may likewiſe now and then have new laid eggs boiled very ſoft, and ſometimes a little chocolate mixed with their milk at the age of four or five, but ſeldom before: they may be allowed to dinner a little tender meat, but not to ſupper, for ſuppers ſhould always be light: too much bread is detrimental to the delicate, whoſe ſtomachs are weak, and who are ſubject to the acidities, but is otherwiſe neceſſary to thoſe who eat a great deal of meat, being a corrective; but ſuch as live moſtly on vegetable diet, have much leſs occaſion for it.

4. They ſhould be prevented from eating paſtry, things oily or high ſeaſoned, ſauces and heating liquors, which deſtroy the ſtomach, ſtrength, and nerves; let them have but little or no acids and never wine, though it appears at firſt to give ſtrength, in time it muſt certainly diminiſh it, as digeſtion is not ſo well performed when it is drunk: and it is a known remark in all countries, that water drinkers are more vigorous, healthy, ſprightly, and long lived than thoſe who drink wine: the difference is very viſible in children, among thoſe to whom it is given, and thoſe who are denied it; the laſt of whom, at preſent (at leaſt with us) are by much the greater number. I have ſeen ſeveral who were weak, ſmall, languid, ill, melancholy and ſleepleſs, recovered without any other aſſiſtance than the retrenchment of wine, coffee, and tea. There is but one weakneſs, little underſtood, and very dangerous, which can-

can maintain the prejudice in this particular that a total privation of what is not contracted into a habit is unneceſſary, and, if diſcontinued a few days, not hurtful, though in itſelf inveterate: others think themſelves indemnified for the loſs of health by the agreeable flavour, and temporary ſpirits beſtowed. Unhappily the malady does not always obviouſly manifeſt itſelf after each error, which occaſions admonition to be ſo often diſregarded. Sometimes the inflammatory things themſelves ſeem for a while to be beneficial; but the pernicious blow follows with the greater violence. I have ſeen children born weakly, or who afterwards became ſo in a few months, by means of an improper regimen, to whom were given, by advice, meat, ſtrong ſoups, gravy, a great deal of chocolate, and Spaniſh wine itſelf, encreaſe in growth, beauty, and ſtrength for ſome time, and afterwards, all at once, at about four or ſix years of age, fall into a violent diſorder, which carried them off in a few days, or into a rapid decline, which put an end to their lives in a few weeks.

5. They ſhould never be bound up or ſwaddled without diſcuſſing the numberleſs reaſons on which this advice is founded: let mothers compare a child who has not been bound tight and one who has, or the ſame child in its tight dreſs and out of it.

6. They ſhould be waſhed or bathed in cold water; this of itſelf is of great efficacy, and without which we cannot promiſe ourſelves to be completely ſucceſsful. But as directions with reſpect to this head, are to be found in many works, I ſhall not at preſent recapitulate them *. It is alſo of great ſervice to rub their

* See amongſt others Tiſſot's Advice to the People, § 384. *T.*

bodies

bodies frequently all over, but more particularly the back bone, morning and evening, with a piece of dry flannel.

7. The choice of air is another moſt important article; but I ſhall confine myſelf to ſet forth its neceſſity without reciting the particulars which ſhould direct us in its choice. It may be objected that every one cannot do it, which muſt certainly be allowed; but it muſt be underſtood, that reference is here only made to weak children: and ſuch perſons who are more particularly the objects of this work, are generally in a ſituation which enables them not to neglect any thing in the education of their offspring. After having choſen a proper place of reſidence, it muſt be quitted as much as poſſible for the open air. Within doors cold rooms ſhould be habitually preferred to hot, and the children thinly cloathed and well exerciſed; firſt let them tumble about upon a large bed, afterwards upon the boards, then upon graſs or gravel, and when they can go alone, let them walk and run about as much as poſſible.

8. We muſt not exact too great an application from a feeble child: the action of the nerves is almoſt entirely loſt on the body; and as it is neceſſary to encreaſe the ſtrength, compulſion to a delicate child muſt be the way to deſtroy his health, and to throw him into every nervous diſorder.

9. They muſt have as much liberty as poſſible, conſtraint intimidates and ſcares them, deſtroying their ſtrength and vigour. A celebrated Daniſh phyſician, to whom we owe a curious treatiſe on the cauſe of the difference between the Germans of Cæſar's time, and thoſe of the ſixteenth century, reckons conſtraint

ſtraint among the firſt cauſes of the weakneſs of the latter in education *.

Sect. 79.

When we treat of a mature perſon paſt growth, we muſt employ remedies appropriated to their years. I have ſeen by temperance, abſtinence from ſauces, wines, and ſtrong liquors, enjoying exerciſe and good air, the moſt delicate acquire ſtrength, and loſe thoſe ſenſations which rendered them ſo unhappy.

Sect. 80.

After theſe obſervations on the prevention and cure of too delicate a conſtitution, I ſhall proceed to the different methods of curing its different diſorders; their cauſes, as before mentioned, being imperfect digeſtion, weak nerves, obſtructions in the bowels, irregular perſpiration, and an inflammatory diſpoſition in the humours. Such a ſituation preſents theſe hints, viz.

1. To mend digeſtion.
2. To quiet the agitation of the nerves.
3. To diminiſh the feveriſh inclination by diminiſhing the ſharpneſs of the humours, and to facilitate perſpiration, the obſtructing of which cauſes thoſe catarrhal, and ſometimes inflammatory fevers, which finally produce the moſt malignant diſorders of the breaſt.

Sect. 81.

With regard to the firſt particular, an opportunity to aſſiſt the ſtomach appears daily, but

* Conringius de habitus corporum Germanor. antiquis & novis cauſis, art. 6, § 48, p. 226. T.

nothing

nothing is more frequently miſtaken than the means. Various cauſes impede digeſtion, and ſometimes they are diametrically oppoſite. It is, nevertheleſs, only by attacking the cauſe that we can effect a cure, when unhappily we think of nothing elſe but the effect. Some have thought that the ſtomach which cannot digeſt, muſt be weak, and to re-eſtabliſh its tone it muſt be ſtrengthened; for this reaſon are taken multitudes of hot medicines, preparations of ſteel, aromatic opiates, bitter draughts, burning elixirs, drying pills, and a variety of other drugs equally puffed and pernicious, and only of ſervice in caſes where there is too great a relaxation in the fibres, ſtomach, and bowels—Inſipidity in the bile, too much water in the liquids, ſeparated by the gaſtric and inteſtinal glands. But very often the diſorders of the ſtomach depend on very oppoſite cauſes: the ſpittle and ſtomachic juices being too thick and inſufficient in quantity, the fibres ſtiff and inflamed by late hours, melancholy, languor, more common in people of rank than others; heating meats and drinks, bilious inflammation and over-charged liver, more commonly occaſion bad digeſtions and diſorders of the ſtomach, than the weakneſs and relaxation in that organ. This gives the reaſon why thoſe diſorders very often cannot be cured without a renunciation of ſuch foods, drying regimen, chocolate, eggs, ſauces, and hot drinks, to live upon innocent meats, pulſe, fruits, ſometimes whey, barley-water, lemonade, chicken broth, and plain water; and in trying the efficacy of glyſters, the frequent uſe of which is condemned by ſome phyſicians with too much ſeverity; for they are ſuperior to any other remedy when a variety of circumſtances concur to cauſe dryneſs,

neſs, heat, or even an inflammation in the bowels. At other times theſe diſorders require purging, bleeding oftener than is commonly imagined, and frequently baths luke-warm, which powerfully re eſtabliſh appetite and digeſtion, when the cauſe of the diſorder is a hot acrimonious, dry, or inflamed principle, which is not uncommon. But they muſt go into a common bath, for a bathing tub ſhould be preſcribed, in which the body is in pain; for what compreſſes the veſſels muſt be hurtful if often repeated.

Sect 82.

Nervous diſorders, that diſpoſition to be too eaſily affected and ſuſceptible of irregular and painful emotions, is one of the moſt cruel ſcourges to people of rank that has been advanced, it moſt commonly occurs, and till now, has been peculiarly unhappy in a miſtaken treatment, becauſe its origin had not been ſufficiently inveſtigated: its different ſpecies, which required very different remedies, was left unexamined. This branch of phyſic is at preſent too much confined to hypotheſis, the ſubject of party diſputes, or at leaſt influenced by faſhion.

Many eminent phyſicians, regarding all diſorders of the nerves as the conſequences of relaxed fibres, and weak digeſtions, would effect a cure by means of remedies which are hot, and ſtrengthening, by gums, ſteel, bitters, camphire, caſtor, muſk, ſpirituous tinctures, opium, &c. which is an error ſimilar to the following, in ſpeaking of indigeſtion and ſtomachic remedies. In attributing all nervous complaints to one cauſe, they have propoſed but one kind

of

of remedy, which unhappily has no better ſucceſs than in complaints of the ſtomach. Nerves inflamed by the immoderate uſe of aromatics, are not relieved by uſing aſſafœtida; a ſharper medicine than the moſt piquant aromatics; thoſe who are dried up by the abuſe of Barbadoe's water and Maraſquin, will not find aſſiſtance by drinking great quantities of tincture of Gentium, of Valerian, or of Caſtor; but thoſe remedies ſo hurtful in theſe caſes, are very beneficial in caſes where a weak fibre or poor and watery blood are the true cauſes of the complaint, and ſuch caſes often do occur.

Sect. 83.

Another claſs of phyſicians, in which we may enumerate ſome juſtly celebrated names, have adopted a principle broached by the moſt ancient phyſicians, and formerly refuted by *Galen*, that the nerves vibrate like ſtrings, that all hyſteric, hypochondriac and convulſive diſorders depend on the exceſs of their tenſion, that they cannot be cured but by relaxation; that by the ſame rule all the aliments and drinks which are not inſipid are hurtful, and that the beſt and only good remedies are baths, cold or luke-warm, frequent and almoſt frightful quantities of drinks purely aqueous. This method is excellent, when the ſharpneſs of the humours, the dryneſs of the fibres, the inflammation of the blood, the heat and thickneſs of the bile are predominant, and may have, and has had, the moſt happy ſucceſs, and has been uſed by my friend Mr. *Pome*, who with great adroitneſs hath affected the moſt admirable cures. But in all caſes this is not the reſourſe, but an abſolute contraſt to the remedy.

Sect.

Sect. 84.

The tonic and relaxing methods have their uſes; phyſicians, who confine themſelves to one only, deprive ſome of their patients of the moſt beneficial remedy; and themſelves of the pleaſure of ſucceſs, the manner of employing each ſhould be underſtood, and often in a very different manner, if ſucceſs is deſired in ſuch caſes as admit a cure; a method is not the leſs eſtimable becauſe it is the moſt favourite method of a rival.

Sect. 85.

There is but one article in which the partiſans of the two ſyſtems ſeem to agree, and to which their principles, though diametrically oppoſite, lead by different paths. It is to forbid ſeverely and indiſcriminately bleeding and purging, of which numerous obſervations demonſtrate the uſe and neceſſity to thoſe, who not being devoted to either party, attach themſelves only to a diſcovery of the cauſes, and to oppoſe to each that remedy which experience has proved to be proper to deſtroy it.

If thoſe who are replete with genius and literature, and at the head of theſe ſyſtems, would but caſt their eyes towards the obſervations from which they are at preſent eſtranged, and behold the inconveniency of treating diſorders oppoſite in their cauſes by the ſame method, enlarge their views, and deſpiſe what had hitherto occaſioned their ignorance, they would increaſe their own ſucceſs, and the acknowledgments of the public, and ſoon perceive that general rules and methods in the practice of phyſic are dangerous: that they give the greateſt

phyſicians

phyſicians an empirical appearance, by pretending to cure all by a ſingle noſtrum, and inſiſting upon the dependence of thoſe diſorders upon a ſingle cauſe, which is never ſo falſe as when reſpecting the nerves; the proper treatment of which ſhould therefore be mentioned But a particular recital, though much deſired, would lead me too far from the bounds of my deſign, I ſhall therefore confine myſelf to ſome general obſervations.

1. The paſſions being the common cauſe of theſe diſorders, if we cannot remove the objects which awaken them, and weaken their influence, there is no cure to be hoped for.

2. Temperance, early hours, abſtaining from inflammatory viands and drinks, the uſe of exerciſe, country air, and an agreeable relaxation, are the moſt certain remedies.

3. A facility of being ſenſibly affected; decreaſe of mirth, even melancholy without an apparent cauſe; diſordered ſleep, whether more ſhort, ſlight, or ſound, and urinary irregularity, being in general the firſt ſymptoms of bad nerves, the greateſt attention ſhould be paid to the patient in not applying remedies which are too violent. In this claſs I have ſeen the moſt dreadful caſes, which have all grown worſe, being in the beginning not underſtood, and treated violently by ignorant empirics, who often order the ſtrongeſt remedies without the leaſt thought of making an enquiry into the cauſe of each ſymptom, and what effect the medicine will be productive of. To thoſe whoſe nerves are diſordered, all impreſſions being too ſtrong, violent remedies muſt be terrible indeed, and ſuch miſtakes are too common; for nothing occurs more frequently, than to ſee patients afflicted with every diſorder of this ſpe-

cies, becauſe at firſt they had attributed to a diſordered ſtomach, thoſe ſymptoms of uneaſineſs, ſtoppages and oppreſſions in the ſtomach, bad appetite, flatulency, eructations, the jaundice, which were the firſt effects of thoſe irregular motions of the nerves, of the ſtomach, and inteſtines; and there is certainly no phyſician, who has any employment, but muſt have been conſulted more than once by people, whoſe only diſorder was nervous, nevertheleſs which had been treated as ſcorbutic, to the great detriment of the patient. Again, there are other phyſicians, who do not believe that nervous diſorders exiſt, but look upon ſuch complaints as chimerical, and when they find their actual ſymptoms, never deduce them from their true principle, or hardly know what to call them, but generally term them the ſcurvy, a diſeaſe as uncommon among thoſe who are detached from a ſea-faring life, as nervous complaints are frequent with people of faſhion. All ſuch errors are unhappy for the afflicted, upon whoſe ſkin, by a ſtrict ſcrutiny, may be diſcovered ſome ſmall blueiſh ſpots; the ſpecies is immediately fixed upon—and what is the conſequence? they paſs ſix months in taking anti-ſcorbutics. This trifling alteration in the colour of the ſkin, which may ariſe from a number of different cauſes, and be viſible in the ſtrongeſt perſons, is invariably thought to be an error in the blood: in vain the perſon ſays nay; in vain he declares he is in good health; that his humours are ſweet; that he has never lived but in the moſt ſalutary places; that he has not a ſingle ſymptom characteriſtic of the imputed diſeaſe; that his gums are firm, his teeth ſound, &c. 'Tis all uſeleſs; and nothing can excuſe him from undergoing the long and unneceſſary

unneceſſary cure of a diſorder of which he has not even the ſeed.

Another ſtill more pernicious error is miſtaking diſorders of the nerves for venereal complaints, and obliging the patient to ſuffer a ſalivation. This miſtake may not ſeem eaſy; but the many victims to it, ſufficiently evidence the fact to admit its mention.

4. The offices of the nerves being thoſe of the animal machine, which ſeem to require the greateſt perfection in all their operations, are the moſt liable to be diſordered, the moſt difficult to be rectified, and the moſt ſuſceptible of alteration. It is not therefore at all amazing, that diſorders of the nerves ſhould be very common and permanent, and that the alteratives of well and ill, and ill and well, ſhould frequently happen; that the patient need have a great deal of courage, and the phyſician a great deal of patience, before a cure can be expected.

5. The manner of treating theſe diſorders often requires change, becauſe there may not only be a complication of firſt cauſes, each of which ſhould be peculiarly treated, but likewiſe, becauſe ſometimes, when the firſt cauſe which had diſordered the nervous functions is removed, there muſt be other remedies to re-eſtabliſh their tone; and finally, when the mobility of the nerves is too great, being agitated by numberleſs cauſes, and their ſtate greatly varied, they cannot ſometimes ſuſtain the effects of a medicine, which may have been ſerviceable to them before.

6. Warm baths, when there is a hot, dry, ſharp principle, are indiſpenſible: cold baths, or even thoſe to the laſt degree frigid, are of great ſervice, when a reſtoration of the tone a-

lone is to be conſidered; and the moſt violent nervous fits are ſometimes moderated by taking a piece of ice, when all other remedies commonly uſed, or authoriſed by cuſtom, reaſon, and experience, have only encreaſed the diſorder.

Sect. 86.

The third thing requiſite in treating the diſorders incident to people of faſhion is, as hath been before mentioned, to diminiſh the feveriſh diſpoſition, which is ſo common, and dependent on the eaſe with which perſpiration is diſordered.

As this diſpoſition is principally owing to the ſame cauſe which hurts the nerves, and hinders digeſtion, it chiefly requires the ſame remedies. The firſt is an innocent regimen, almoſt entirely compoſed of vegetables, without ſeaſoning, wine, chocolate, coffee, or tea.

The benefit of the warm bath uſed in the morning faſting is here of the greateſt utility. I have ſeen three patients of this claſs, thrown by theſe ſmall fevers into a confirmed hectic, whoſe ſituation ſeemed almoſt deſperate, and yet were perfectly cured by uſing this remedy; and cows milk only for nouriſhment, which has a good effect when it digeſts well and there are no obſtructions; if there are aſſes-milk it may be uſed. But thoſe who would have a rapid cure, muſt take much larger doſes than ſuch as follow the common method; I have made ſome take forty ounces per day. Whey and acids are in this caſe of great uſe.

Sect.

Sect. 87.

The Jeſuits bark. That divine remedy in many diſeaſes, is ſeldom ſerviceable in thoſe cauſed by heat. If it is uſed, it ſhould only be when the inflammatory, ſharp, and dry principle is deſtroyed: if then the feveriſh diſpoſition remains, it diſſipates it, and re eſtabliſhes the ſtrength.

ARTICLE XI.

Obſervations on the MANNER of TREATING particular DISORDERS.

SECT. 88.

PArticular diſorders being the effects of general and determinate cauſes acting on different parts, they ſhould be treated according to the principles which I have already eſtabliſhed: I ſhall therefore be brief.

Extreme Senſibility.

SECT. 89.

That extreme ſenſibility to all impreſſions which render many ſo unhappy, ſhould be treated like diſorders of the nerves, on which it depends, and often requires cold baths, milk-diet, much exerciſe, and the courage to brave the open air, and thoſe things which we moſt dread.

SECT.

Sect. 90.

Sometimes the diſorder only exiſts in the imagination. The vapouriſh perſuade themſelves they are not able to do any thing; when they are very ſtrong, they fancy every thing incommodious which they are very well able to bear; they deprive themſelves of, and renounce all enjoyments; frighten themſelves with an unexiſting bugbear, and court a real one. Such caſes require the phyſician's utmoſt penetration: if he is deluded, the patient is loſt, but if he deceives the patient and gains his confidence, a cure is the work of a minute. I have ſeen five ſuch perſons, who fancied they could neither bear light, noiſe, air, or food, keep their beds in a dark and matted chamber, where none were ſuffered to walk, move, or ſpeak out with the utmoſt precaution; lived only on broth and jellies; thought themſelves dangerouſly ill, ſettled their affairs, and all this while they were perfectly well: I compelled them to ſee, hear, ſpeak, quit their beds, and even their houſe, to eat and act like other people; to feel themſelves well, and paſs in one quarter of an hour from the greateſt miſery to the greateſt happineſs.

Megrims.

Sect. 91.

The megrims at firſt are the effects of faults in the ſtomach, which digeſts too ſlowly, and forms a ſlimy and acid matter. At this period great numbers have been cured by abſtaining from

from fatty ſubſtances, ſalted meats, paſtry, creams and acids; in moderating or ſuppreſſing the uſe of wine, and giving mild bitters, joined ſometimes with purges of the ſame kind: Jeſuits bark and rhubarb are often uſed.

When the diſorder is ſo inveterate as to become an affection of the nerves, a habitual illneſs, it not only obſtinately reſiſts moſt methods of cure, but through prudence, it ſometimes ſhould not be attempted, for a ſuppreſſion of the megrims, as I obſerved before, cauſes more pernicious maladies; we ſhould confine ourſelves to mitigate its force, by rendering the fits leſs frequent, or leſs powerful, which may generally be effected by uſing the regimen and remedies already deſcribed.

When the megrims attack perſons who are ſtrong and full of blood, a total abſtinence from wine and ſometimes meat is neceſſary; at other times frequent bleedings; ſome young people have been cured by marrying.

This diſorder has ſometimes its ſeat in the *primæ viæ* *; and depends upon an accumulated bile which corrupts: purges, a continued uſe of cream of tartar, and above all a temperate and almoſt entirely vegetable diet, are the true remedies.

From 55 to 60 years of age the megrims uſually loſe their force.

There are but few ways of giving eaſe in the fit: tranquillity is almoſt the only one which is efficacious.

* By this expreſſion phyſicians generally underſtand the ſtomach and inteſtinal canal, becauſe in theſe, the concoction and aſſimulation of the aliments begin.

Disorders in the Eyes.

Sect. 92.

This ſtate of the eyes, mentioned in ſect. 37, which is a diſorder of the nerves in thoſe parts, joined to an inflammation in the humours, ſubmits only to reſting the eyes, being careful to avoid glaring impreſſions, many lights, fire, watching, ſtrong drinks, and ſharp or aſtringent waſhes: cold water is the beſt, frequently uſed; and early hours ſhould be particularly regarded. Alſo apply every month or oftner a couple of cupping glaſſes to the nape of the neck.

Cutaneous Disorders.

Sect. 93.

Pimples and tetters in the face, and other eruptions, together with itchings, often without any eruptions, ariſe from irregular perſpiration, and the viſcidity and ſharpneſs of the humours, or often from bad digeſtions. Which of theſe cauſes produce them ſhould be found, and when diſcovered, be oppoſed by the remedies already mentioned in ſpeaking of theſe diſorders.

When it is want of perſpiration, with a thickneſs in the lymph, few remedies are ſo beneficial as the inward application of chervil-juice, gathered

thered in the ſpring or the beginning of ſummer.

Warm baths aſſiſt perſpiration, when it is prevented by too great dryneſs; but when derived from another cauſe, they do more harm than good. I have ſeen ſome children who have brought on ſuddenly a general ſwelling, apparently the effect of too conſiderable an abſorption. When the primæ viæ are loaded with phlegm or acidities, the uſe of mild mercurials, ſuch as the panacea alba, produce the beſt effects.

In general, in diſorders of the ſkin, ſudorifics are ſeldom uſeful; purges are preferable; but above all, temperance and a good regimen are neceſſary. Errors in this are here more obvious than in almoſt any other diſorder; the leaſt diſorder in the ſtomach affects the patient, and cauſes ſometimes an immediate and obvious increaſe of the eruption, with intolerable itching.

External applications are generally hurtful; it cauſes a diſappearance of the diſorder without an eradication, which often carries the malady on ſome internal organ, and is productive of very troubleſome and ſtubborn effects: the only uſeful remedies are ſuch as inſenſibly encreaſe perſpiration; we ſhould avoid all others. This humour which lodged in the ſkin, produces only pimples, heat, and itchings; if carried to the brain, cauſes convulſions, epilepſies, the palſy, and madneſs; to the lungs, mortal inflammations or incurable aſthmas; to the bowels, excruciating cholics, cramps, hypochondriac complaints and the jaundice: the conſtitution is hurt paſt redemption, and thoſe charms to which all have been ſacrificed, vaniſh without hopes of return.

Sometimes

Sometimes ſome of theſe diſorders of the ſkin will yield to nothing; their ſtubborneſs ariſing from ſo ſtrong a principle of the thickneſs in the lymph, that nothing can overcome it but mercury, againſt which its common uſe and violent effects, have prejudiced many, ſo much that they will not hear it even propoſed, and are offended at its being preſcribed. It is undoubtedly doing them a ſervice to let them know that there are many diſorders totally different from the venereal, in which the uſe of mercury is indiſpenſible, and may be given without any bad effect: beſides, it may be uſeful as an anti-venereal to ſuch as little deſerve that diſorder, but are victims to the crimes of their parents, nurſes, or huſbands; and perſons of the firſt rank are as much expoſed to ſuch ſecret infections as others.

The Gout.

Sect. 94.

There are many boaſted remedies for the gout, but experience has proved the inutility of moſt. Experience however has ſhown the efficacy of milk when taken as the ſole diet, by its often curing it, that is to ſay, ſo long as it was taken, the diſorder had no admittance. And it always relieves by rendering the fits leſs frequent and violent.

Thoſe who have not the courage to follow this regimen, muſt at leaſt reſtrict themſelves to a very mild one, renouncing oils, acids, ragouts, and even wine, more particularly if youthful.

youthful. I do not adviſe a ſudden abſtinence when the gout attacks age, but the quantity of common wines muſt be diminiſhed, and a little Malaga now and then taken, or Madeira, Canary, or Samos wines. In ſtrictly following this regimen and temperance, ſupping little or none, or only on milk porridge; in ſometimes taking ſlight purges, and afterwards ſome agreeable innocent bitters; in exerciſing; in uſing at the proper ſeaſon domeſtic warm baths in which a little ſoap and a few aromatic herbs are put, benefit may be found; frequent bathing the legs in the ſame manner will be ſerviceable. We have had an example of a perſon afflicted by the gout many years, who had long and painful fits every ſpring and autumn, that by bathing his legs in this manner twice a-week eſcaped for four years together *. Mineral baths are uſeful; and if there is one popular prejudice, of which reaſon and experience has proved the abſurdity, it is that which forbids bathing in the gout.

In the fit the part ſhould be kept warm; temperance obſerved; taking cold avoided; and if the fever is ſtrong, to moderate it by cooling drinks, by bleeding, leeches, and glyſters.

If weakneſs cauſes it to wander it ſhould be fixed by cordials inwardly and external irritations to the part where it is beſt to be ſettled.

The numberleſs ſymptoms whether ſudden, or chronic, moſtly dangerous, which are the conſequences of a wandering gout, require a variety, and often a long courſe of remedies, which cannot be ſubjected to general rules.

* Commerc. Liter. Noric. T.

Diſorders of the Breast.

Sect. 95.

Diſorders of the breaſt are, coughs, difficulties of breathing, inflammations, tubercles, and conſumptions; but coughs and difficulties of breathing are the ſymptoms of diſorders, rather than diſorders themſelves, and which may be reduced to inflammations, obſtructions, and ſuppurations; ſpaſms, gangrene, ſcirrhus, and adheſion of the lungs, are out of the queſtion. Inflammations have ſeveral degrees, the firſt is that trifling irritation attended with a ſlight obſtruction in the veſſels of the lungs, the conſequence of ſharp humours, or their inflammatory diſpoſition, which occaſion a dry * cough more or leſs violent, and a fluſhing heat which varies likewiſe, as the obſtruction is more or leſs violent. The moſt obvious marks of impaired health are leanneſs, leſs ſleep, parched lips, and the pulſe a little quicker than ordinary, eſpecially after the uſe of ſuch meats or drinks as are in the leaſt heating. The firſt ſtate of hectic inflammation, and the only one neceſſary to mention here, may continue ſeveral years without being conſiderable. It ſometimes has long intermiſſions, the patient is ſometimes tolerably well for ſeveral months, and then has a little relapſe; and this alternative exiſts till the cauſe of the diſorder is either eradicated, or by

* This dryneſs is a ſufficiently diſtinguiſhing mark betwixt this caſe and that of a rheum, which is likewiſe a ſlight inflammation of the lungs, ariſing ſuddenly from ſome external cauſe, and terminating by a copious expectoration of mucus. *T.*

its gaining ground, terminates either in an inflammation of the breaſt which may prove fatal in a few days, or by a ſlight ſuppuration which becoming an ulcer, leads to a real conſumption.

Sect. 96.

It appears from what has been ſaid, that though this ſtate may continue without appearing very alarming, it ſhould not be neglected for fear of the bad conſequences, which may, from ſeveral cauſes, ſuddenly happen.

The remedies are,

1. An innocent regimen, moſtly vegetable, but above all ripe fruit.

The reader may perhaps be terrified on finding in each article an exact regimen preſcribed. I am ſenſible of the ſame, but its importance, and the little hopes of ſucceſs without, make it appear indiſpenſibly neceſſary. How ſhould cooling remedies diſſipate the inflammation in the blood if it is at the ſame time encreaſed by ſtrong meats, hot drinks, nightly revels, and general exceſs: Is there any hope to bring a ſtomach to its proper tone by remedies, if twice a-day improper aliments are taken? Is it reaſonable to think that aperients will be of uſe in obſtructions, or operate when ſurrounded by fat or oily food, which by ſheathing, prevents their acting, and encreaſes at the ſame time the ſtoppage of the veſſels?

2. There is nothing better to change the inflammatory diſpoſition of the blood and lungs, than ſmall bleedings in the arm now and then repeated.

3. Whey plentifully drunk in ſpring, lukewarm half baths in fine weather, and frequently bathing the legs before retiring to reſt.

4. Great

4. Great care to avoid the air, of places too much inhabited, or that which is too piercing; the air of hot rooms, or where there is too much company; to live much in the country, and particularly to retire ſoon to reſt, for in this caſe late hours are very hurtful.

Perſons thus afflicted ſhould avoid ſinging; and vocal muſic ought to be baniſhed from the education of young people whom we may ſuppoſe to have the ſeeds of this diſorder. Employments which require much exertion of voice ſhould be ſhunned; and the office of Major to a regiment has often killed military gentlemen whoſe lungs were not the ſtrongeſt; the conſtrained attitude, practiſed in general, during their exerciſe is very prejudicial to the breaſt, and I have ſeen ſeveral officers whom it has cauſed to ſpit blood.

When the diſeaſe ſeems aggravated, the bleedings ought to be repeated often and fleſh diet diſcharged.

In this ſtate the conſequences are more feared about the age of thirty than at any other time; and this popular fear is not without foundation: it is certain that when the body is come to its full growth, and the fibres acquired ſtrength, the blood likewiſe thickens and inclines to be inflamed; the perſon is engaged in buſineſs, meets with rubs, the mind is more on the rack, he ſleeps leſs and not ſo ſound; all this augments the diſorder, and the lungs are eaſily inflamed. If that age which is the moſt violent and dangerous is paſt, and he arrives at the age of forty without an increaſe of the diſorder, there is much leſs danger: it nevertheleſs remains and ſometimes I have ſeen the ſuppuration form at the age of fifty ſix: but nevertheleſs, by a ſtrict obſervance of the regimen already laid down, the

tient may live very long, after coughing all his life, with no other inconvenience in his old age but extreme leanneſs, more frequent coughing, and more abundant expectoration, for the ſpace of half an hour after riſing in the morning. The lungs, which had been long inflamed, now become relaxed and require much the ſame treatment with regard to diet, but not the ſame remedies, indeed ſeem to admit of none.

Sect. 97.

Perſons thus afflicted ſhould avoid marriage, which augments the complaint, and haſtens the conſequences.

Sect. 98.

Spitting blood is often the effect of a fall, a blow, violent exertion, ſtrong paſſions, and other ſudden and ſtraining cauſes, but theſe are unneceſſary to be mentioned here; but that ſpitting of blood which is the natural conſequence of defect in the lungs, often attached to particular families, and which often deſtroys them, ſhall be conſidered. It proceeds from a weakneſs in the veſſels of that organ, which having leſs ſtrength than is proportionably neceſſary, yields more eaſily to the efforts of the blood, which by degrees ſwells, diſtends, and renders them varicous or aneuriſmatic *.

It is ſeldom ſeen in infancy—the watery humours, innocent foods, their digeſtive functions, and copious evacuations, prevent it: but it ſometimes diſplays itſelf as ſoon as puberty ap-

* By *varices* phyſicians mean morbid dilatations in the veins of any organ; and *aneuriſms* are ſuch as happen in the arteries.

pears,

pears, ſometimes later, commonly between twenty and thirty years; then the ſame cauſes mentioned in ſect. 96, concerning inflammation, appear, and begin to dilate the veſſels; the patient is attacked by a trifling cough, ſlight oppreſſion, weakneſs, leanneſs, and hoarſeneſs; this ſtate continues often for months; at laſt the ſpitting of blood appears more or leſs; this is the dangerous time, this is the time when it is alarming. Sometimes the veſſels ſhut after this firſt bleeding without inflammation or ſuppuration; but being weak ſoon are diſtended, the diſtention impedes reſpiration, the patient is oppreſſed, he coughs, cannot ſleep, his lungs are diſordered, his ſtrength diminiſhes, and his blood is diſordered; he feels irregular attacks of a fever, which ſoon becomes continual with exacerbations in the evening, terminated by a nocturnal ſweat more or leſs plentiful, which greatly weakens; but if it does not take place, the oppreſſion and cough redouble their rage, ſo that he neither knows whether to deſire, or fear it moſt.

It augments progreſſively, ſometimes in a return of blood ſpittings, other times they never more appear, but the fever encreaſes, and the anguiſh and reſtleſſneſs become intolerable; the leanneſs daily encreaſes, the ſtrength decays, and a deadly fainting finiſhes the life of the patient when he leaſt expects it, often without a purulent expectoration, and even ſometimes without any expectoration at all.

Sect. 99.

Other times the malady takes a very different turn; after the firſt ſpitting of the blood, it forms an inflammation in the lungs and ſuppu-

ration; the hectic fever, cough and purulent ſpittings come on, and the diſeaſe making the ſame progreſs as in the preceding caſe terminates in the ſame manner.

Sect. 100.

The moſt certain method of preſerving ſuch as are attacked by this dreadful diſorder, is to prevent the ſpitting of blood; it ſometimes happens, though rarely, that the diſeaſe makes all the progreſs mentioned in § 98, and that the patients even die without ſpitting any blood, in ſuch a caſe, every thing proper ought to be uſed to check the diſorder; the moſt effectual are thoſe mentioned in ſect. 96, to prevent the progreſs of inflammation. Above all, young perſons who are threatened with this diſorder ſhould be proſcribed from their infancy whatever encreaſes blood, tends to inflammation, or ſettles upon the breaſt: follow the directions in ſect. 96. Singing and declamation are likewiſe in this caſe more hurtful than in the preceding. Whalebone ſtays are dangerous, and ſhould not be abſolutely forbid, they often cauſe ſpitting of blood two hours after having been put on. With theſe precautions ſucceſs may be expected. I preſerved the laſt of fifteen children, fourteen of whom periſhed by this means, between twelve and ſeventeen years of age.

Sect. 101.

When the ſpitting of blood has once appeared, the hopes of a perfect cure are much leſſened: the beſt thing to be done is bleeding frequently, which always ſhows the blood in an inflamed ſtate, light food, whey, decoction of barley,

barley, acids, pure gentle air, tranquillity, and ſeldom any other motion than an eaſy ride on horſeback; the patient muſt be weakened and reduced, if we may be allowed the expreſſion, for ſome time by the gentleſt method poſſible; and when once the fever is gone, and the inflammation in the blood deſtroyed, the ſtrength muſt by degrees be recruited by gentle reſtoratives, ſuch as ſmall doſes of Jeſuits bark.

Sect. 102.

In their birth tubercles * are not very dangerous, and do not obviouſly exiſt; they are found in dead bodies without the ſymptoms ever having appeared when alive; but when they become more numerous or larger, and occupy a conſiderable part of the lungs, they begin ſenſibly to impede their functions; the patient finds a difficulty in breathing, and is eaſily out of breath; going up hills, walking, violent motions, hot rooms, and wet weather affect him; he breathes ſhort, and is ſometimes obliged to be quite ſtill, but has commonly neither pains nor heat at the breaſt.

As the malady encreaſes, theſe ſymptoms become ſtronger, joined to a little dry frequent cough; but ſometimes, nevertheleſs, violent fits happen, combined with obſtructions in ſome of the viſcera of the lower belly, and above all in the ſmall lobe of the liver, and attended with a weight at the pit of the ſtomach, ſometimes an uneaſineſs all round the body, as if one had a girdle drawn too tight.

* Vide § 41.

Sect.

SECT. 103.

Tubercles neglected too long or badly treated, or ſometimes even though ever ſo well treated, may have bad conſequences; either the patient periſhes merely through a ceſſation of the action of the lungs, without inflammation or ſuppuration, which throws him inſenſibly into a weakneſs and conſumption, with ſymptoms ſimilar to thoſe mentioned in ſect. 98, and finally into a mortal languor, when theſe tubercles ſuppurate and ulcerate.

SECT. 104.

The firſt method of termination is not uncommon, the afflicted die without pain, even without cough or ſpitting; other times he has a cough and ſpitting, but only voids a ſlimy matter ariſing from the irritation of the veſſels of the lungs like the ſpitting in the beginning of the rheum, very rarely drops of blood, and more uncommon ſtill, at the expiration of the diſeaſe, corrupted matter.

SECT. 105.

The ſecond termination is an inflammation of the tubercles; theſe tumours compreſſing the ſound neighbouring parts, cauſe an obſtruction. A fever begins, the ſwelling is inflammatory, the patient has a ſhivering, fever, cough, oppreſſion, and all the ſymptoms of a ſlight inflammation or thick rheum: the diſorder often receives this laſt name; it terminates by a ſmall ſuppuration at the bottom of the tubercle; he ſpits a ſmall quantity of corrupted matter for a few

a few days or weeks, he keeps his room, drinks balſamic pectorals, and is cured for a while. A ſecond tubercle makes greater progreſs; the inflammation is heightened by heat, the ſame ſymptoms, cauſed by the firſt, are re produced and end ſimilarly.

The ſame ſcene is often repeated during ſeveral years, and becomes more frequent with time; at laſt part of the lungs being deſtroyed, the reſources are deſtroyed; the termination is no more complete, a permanant ſuppuration is eſtabliſhed, the lungs are deſtroyed, a purulent conſumption ſucceeds, and the concluſion is death.

Sect. 106.

This ſpecies of diſorders of the breaſt though known ever ſince the firſt exiſtence of phyſicians, and well deſcribed with its two terminations by *Hippocrates* himſelf, has not ſufficiently excited the attention of phyſicians. At the end of the laſt century, Mr. *Morton*, an Engliſh phyſician, and about forty years ſince, Mr. *Deſſault*, a phyſician of Bourdeaux, made the importance of this article evident: nevertheleſs it has not been ſufficiently conſidered as yet, and many phyſicians ſeem ſcarcely to know it; and what is ſtill more alarming, its treatment is really difficult even when known, becauſe care muſt be taken in giving the attenuants neceſſary to remove the obſtruction not to cauſe an inflammation.

In the beginning, while the diſorder is only a crude tubercle without inflammation or ſuppuration, an innocent regimen, conſiſting almoſt entirely of herbs, fruits and water, once or oftener bleeding, if the patient ſeems to be plethoric

plethoric, aperient remedies of the mildeſt kinds, among which M. *Deſſault* with reaſon, places mercury, of which I have often ſeen the good effects, ſoap pills, an extract of hemlock and juice of white horehound, are the beſt remedies. It is in the cure of this ſpecies that the water creſſes hath gained a reputation ſuperior to moſt other things. Milk is improper in theſe caſes, and if uſed, peculiar circumſtances in particular patients are the occaſion, and in general, we adviſe not to uſe it too indiſcriminately in all kinds of coughs: there are many in which it is very hurtful.

When the diſorder takes the firſt turn, and is arrived to the criſis mentioned in ſect. 103, it is a moſt incurable phthiſic; a cure cannot be expected, and all that can be hoped for is to retard its progreſs; the means to effect which, vary ſo much that it would be improper here to inſert them.

Sect. 107.

In the inflammatory ſtate of each tubercle while it remains, treat the patient accordingly by bleeding, innocent drinks, oxymel *, nitre, and light diet; and when it is arrived to the ſtate of ſuppuration, let him be confined to vegetable diet, honey, and barley water, or proper pectoral infuſions, ſuch as ground-ivy and ſpeedwell; and if he has a ſmall fever daily, ſmall doſes of mineral acids will be of ſervice.

* Oxymels are forms of medicines in which honey and vinegar are united.

Sect.

Sect. 108.

Decoctions of ſaponaceous herbs are often uſeful in this diſeaſe, they work upon the tubercules like aperients, and at the ſame time correct the inflammatory diſpoſition of the blood: for which reaſon they may be ſucceſſfully uſed as long as this firſt ſtate ſubſiſts, the pulſe is hard, and the blood retains the pleuritic cruſt; and I have often ſeen the good effects of ground-ivy, groundſel, ſow-thiſtle, great houſe-leek, &c. but when the ſtate of the blood is changed, and paſſes from inflammation towards diſſolution, they muſt be proſcribed becauſe they haſte its progreſs.

Sect. 109.

We find conſumptions, tho' different at firſt, ſimilar in their laſt ſtage, which is that of a ſuppuration eſtabliſhed upon the lungs. At this period the requiſite remedies are the ſame for all ſpecies, and are ſoon equally uſeleſs: the cure of this diſeaſe requires a ſpecific to deſtroy the virulent diſpoſition of the blood, but unhappily none ſuch is yet known; therefore all that can be tryed is to cauſe the patient,

1. To live uniformly upon vegetables or ſkim-milk; this regimen does not deſtroy the purulency, but forms a kind of blood, much leſs ſuſceptible of corruption than meat, and by that means retards its progreſs.

2. To give remedies which concur to the ſame end, moderate the fever, and at the ſame time ſupport the ſtrength: ſmall doſes of Jeſuits bark and a little ſpirit of vitriol in their common drink, above all, at the time of the encreaſing

encreaſing fit, are uſeful; a little myrrh often does good; a ſimple decoction of barley, oatmeal, or rice, an infuſion of periwinkle, equals, in my opinion, the moſt boaſted drinks.

Sect. 110.

While ſtrength remains, and the pulſe continues ſtrong, a little blood frequently taken away is beneficial, becauſe it prevents the inflammation in the lungs which the matter would cauſe, and an increaſe of the fever which would be the conſequence: thus it always retards, though it cannot cure the diſorder, and for all the prejudice of the public and many phyſicians againſt bleedings in conſumptive complaints, my own experience has confirmed what M. *Dover*, many years ſince, aſſerted in their favour in this diſorder; the characters and difference of which have not as yet been ſufficiently examined, and which I may, perhaps, farther inveſtigate in a future work of this kind. I ſhall now proceed to.

Disorders of the Lower Belly.

Sect. 111.

The firſt is bad digeſtions, but as the proper treatment of them has been mentioned, nothing farther can be ſaid here upon that head.

The inteſtines being upon the ſame conſtruction, and of the ſame uſe as the ſtomach, are ſubject to the ſame diſorders, and ſhould be treated in the ſame manner as in ſect. 81. When the patient feels a heat in them, and is coſtive, and

and at the ſame time has fluſhings, drought, and a quick pulſe, the uſe of freſh water as table-drink, glyſters of ſimple water, and carefully abſtaining from all heating meats will remedy thoſe ſymptoms while purges are tried in vain, ſince in general they only irritate. But when ſuch ſimple aſſiſtance is inſufficient, every morning and evening half a quarter of an ounce of cream of tartar ſhould be taken, or a quarter of an ounce of pulp of caſſia recently extracted, without mixing water, as is commonly done by the apothecary. If the entrails are tender, and if there is no fever but only a great deal of heat, dryneſs, and inflammation, ſymptoms which are often the effect of a ſharp bile too much irritated, the ſofteſt pulp of caſſia is to be preferred; in the fever cream of tartar is beſt, warm baths are likewiſe excellent.

Sect. 112.

The hæmorrhoids are another diſorder of the inteſtines, which for above an age were generally looked upon as beneficial, though in reality pernicious. This inconteſtable principle may be eſtabliſhed, that they are always the effect of bad health. It is true, that while this bad ſtate continues, they are an evil which may prevent others, but ſince they are an evil, tho' ſupportable, and but little incommodious, that may become painful and dangerous, and that otherwiſe their irregularities, when habitual, are as inconvenient as the irregularity of the courſes, they ought to be checked in their very firſt appearance; that is to ſay, all poſſible means ſhould be uſed to deſtroy the original cauſes, which are commonly obſtructions in the

bowels of the lower belly, too much blood, a ſtubborn coſtivneſs, and ſedentary life.

The ſuperabundance of blood is leſſened by diet, a vegetable regimen, now and then laxatives, ſulphur, and cream of tartar.

The means of removing coſtiveneſs has been ſhown: ſtoppages in the veſſels now require attention.

Obstructions in the Bowels.

Sect. 113.

Obſtructions are the impediments which the juices meet with in paſſing through the ſmall veſſels, and have various degrees: a *ſlow circulation*, in ſome part, either owing to weak veſſels, thickneſs, or viſcidity of the fluids, or ſome compreſſion, to which the part is expoſed, is the origin of obſtruction: if the circulation entirely ceaſes in ſome veſſels, the obſtruction is more mature, and when it ceaſes in all, complete. If the part at the ſame time has acquired a great degree of hardneſs, and the nerves ſo much compreſſed as to become inſenſible, the diſorder is a ſcirrhus; no part is exempted from obſtructions, the lungs and brain are ſubject to it, but the bowels moſt.

1. Becauſe they have from ſeveral cauſes a ſlow circulation.

2. For a reaſon not ſufficiently attended to, viz. the being more expoſed to irregular preſſure, which depend on the continual variation in the diſtenſion of the ſtomach and bowels.

3. By the nature of the humours which are ſeparated in moſt of the bowels; and above all, on account of the bile, too ſuſceptible of thick-

neſs

neſs and hardneſs: ſo that of all the viſcera none are ſo liable to obſtructions as the liver.

Of ten adults who have obſtructions, nine of them are in the liver; others have them chiefly in the myſentry, which is their common ſeat in children, and ſometimes in the pylorus, which being ſurrounded by many glands, is conſequently very liable to obſtructions, and eaſily becomes ſcirrhous—a cruel diſorder attended by vomitings, a weight, and afterwards pain in the part productive of death, the patient periſhing with hunger, and after having felt the ſharpneſs and corruption of the humours, and above all of the bile, which is always diſordered, and ſometimes black and fœtid. Of caſes in this ſpecies we want better accounts than have hitherto appeared.

The ſpleen is much ſeldomer obſtructed than is commonly believed.

Sect 114.

The firſt remedy is temperance; for only by diminiſhing the humours, a re-eſtabliſhment of the circulation in the obſtructed part can be hoped for.

2. Care to avoid greaſy and viſcous aliments, ſuch as feet, heads, and entrails of animals; paſtry, milk, cheſnuts, potatoes, and indeed whatever cauſes phlegm.

3. The choice of meliorating aliments, ſuch as herbs and watery fruits. Obſtructions which have withſtood all other remedies, have been removed by living ſix months upon wild ſuccory: and all kinds of ripe fruits which ſucceed each other without intermiſſion, from the earlieſt cherries, to autumnal grapes; with a little bread and water.

4. By regularly rubbing with a dry flannel every morning, the part affected and the bowels, which facilitates the circulation, and diſſolves the thick humours. The uſe of theſe frictions is deſcribed at large in an *Eſſay on the Health of Sedentary Perſons*.

5. By much exerciſe in country air, without which ſucceſs cannot be hoped for.

6. By a conſtant uſe of attenuating remedies, beginning always with the mildeſt: the beſt are the juice of ſuccory endive, and anti-ſcorbutic herbs, ſimply expreſſed when the ſeaſon, plant, and ſtomach permit; an extract may be prepared when the plants are no longer juicy; when the ſtomach cannot retain any thing raw; or finally, when it is neceſſary to diſſipate the virulent, or too active juices, ſuch as hemlock; Venice ſoap, gums, antimonial preparations, bitter ſalts, cream of tartar, ſea-water, mineral-waters, mercury, ſteel, and aperient roots.

The choice of theſe remedies is determined by accidental circumſtances. Obſtructions of the liver require the juice of fruits, herbs, ſalts, cream of tartar, and ſaline mineral waters. Thoſe of the meſentery, ſoap pills, gums, mercury, antimony, ſteel, and mineral waters impregnated with ſulphur.

The intermiſſion or preſence of the fever, acid or putrid ſymptoms, require variety of remedies. During the uſe of aperitives in obſtructions, but particularly thoſe of the bowels, purges muſt be frequently employed.

In thoſe of the pylorus care ſhould be taken not to uſe any ſharp remedy, the effects of which acting upon the part itſelf ulcerate it, and has terrible conſequences.

SECT.

SECT 115.

Warm baths, by relaxing the veſſels, and diluting the humours, greatly aſſiſt the cure, and when there is no reaſon to the contrary ſhould never be neglected, but above all in obſtructions of the liver.

Perſons ſubject to bad nerves are often troubled with obſtructions which are the conſequences of theſe diſorders, and require the ſame remedies. But the moſt active which are given in other obſtructions, in theſe irritate too much, and inſtead of leſſening, encreaſe the diſorder. Warm mineral bathing, even without drinking the water, has often cured obſtructions which had baffled all other remedies.

Of CHOLICKS from STONES in the GALL-BLADDER.

SECT. 116.

Cholics, which depend on ſtones in the bladder of the gall, and commonly ariſe from the paſſions more than any thing elſe, ſhould be corrected by drinking only water, and a vegetable diet; the juice of herbs, above all ſuccory, dandilion, creſſes, fumatory, are the beſt remedies to expel; whey, manna, honey, and long journies in a carriage, the motion of which may be quickened, and rendered more rough, according as the uſe of the remedies mentioned have been continued; mineral waters and thoſe of Balaruc, which produce excellent effects,

are very proper to deſtroy this diſorder. But when there is room to ſuſpect ſtones of a larger ſize, ſuch active medicines ſhould be avoided, which far from diminiſhing, encreaſes the diſorder, augments the pain, and may have very bad effects.

Sect. 117.

The vapours and hypochondriac complaints remain to be mentioned, but cannot be ſo copiouſly treated of here, as in a work begun ten years ago, which I ſhall carefully execute and publiſh to the world, concerning diſorders of the nerves. I have nothing to add to what has been ſaid of nervous complaints in general, and ſhall therefore proceed to female diſorders mentioned in ſect 47.

Irregularity of the Courses.

Sect. 118.

The firſt is irregular menſes, ariſing from the ſharpneſs of the humours, a tendency to obſtructions, and the mobility of the nerves and paſſions. This diſorder ſhould be carefully treated, and in all ſuppreſſions depending on theſe cauſes, hot remedies are cautiouſly to be avoided, on account of irritating the nerves, and giving an inflammatory thickneſs to the blood, thereby prolonging inſtead of ending them. They yield to a mild regimen, a regular life, warm baths, mild aperitives, conſtant exerciſe;

exerciſe *; but purgatives, which are detrimental in the ſuppreſſions, are more dangerous in thoſe which ariſe from nervous diſorders.

Frequent menſtrual evacuations, require the ſame mode of life; whey, baths almoſt cold, Jeſuits bark when it is certain there is no hot principle, bleedings, gentle purges, and ſometimes ſtrong acids, ſeldom aſtringents, which in delicate perſons may cauſe ſpaſms or other nervous complaints. Milk made the ſole nouriſhment will cure ſome whom other things will hardly eaſe.

Miscarriages.

Sect. 120.

There are two things to be conſidered in the treatment of miſcarriages. One to prevent a miſcarriage when it ſeems to threaten; the other to prevent that diſpoſition to frequent miſcarriages, which has been before mentioned. Theſe objects pre-ſuppoſe that the greateſt attention has been given to examine their cauſes.

When it is a too great quantity or heat of blood that cauſes the miſcarriage, which is often occaſioned by an exertion, ſtart, emotion, or extenſion of the arm, the beſt remedy is directly to bleed once or oftener; to put the patient in a bed rather hard than ſoft; to let her be immoveable and ſilent; to give her nothing but a few inſipid aliments and cooling drinks, ſuch as barley or rice waters, almond milk,

* Riding on horſeback, is of all kinds of exerciſe the beſt, and particularly ſo in this caſe.

chicken

chicken broth; one or two gliſters daily to prevent the bad effects which hardened excrements may cauſe. The acuteneſs of the pain ſometimes requires anodynes; but ſometimes the beſt remedies are ineffectual; and when there is a plentiful flooding, it is difficult to prevent a miſcarriage. Sometimes it is imagined that the diſeaſe is got the better of, the flooding and pain ceaſes, the patient revives and hopes, but in a few days the ſymptoms re-appear, and never depart till the burden is dropt.

Sect. 121.

When the miſcarriage is cauſed by weakneſs, it is longer in taking place, being towards the fourth, fifth, or ſixth month, and is announced for ſome time before it arrives, by the mother's languor, weakneſs, paleneſs, pain in the reins, heavineſs in the bowels, a diminution of the infant's motion. If early when this ſtate begins, the mother is kept quiet, and takes nothing but what is light and nouriſhing; if ſome mild ſtrengtheners are given, intermixed with one or two laxatives, if it is ſuſpected that ſtoppages in the *primæ viæ* are one cauſe of the weakneſs, and if applications are made to the reins according to the ſymptoms, the life of the child may be preſerved and a miſcarriage prevented. But if it is neglected, and the flooding begins, which in this ſpecies comes leſs forcibly than in the other, there is but little hope; and indeed, it can hardly be wiſhed for, for this kind of miſcarriage rarely happens till after the death of the child. It is beſt for the mother to be delivered firſt, becauſe if the labour is ſtayed after the child is dead, ſhe ſeldom enjoys good health till ſhe is freed of it.

Sect.

Sect. 122.

Early precaution to prevent miſcarriages among thoſe who are ſubject to them, ſhould be carefully taken, as they are eaſily divined by the rules eſtabliſhed in the two preceding articles; but their application requires many directions, and contains remedies which cannot be expected to be found in a work not deſigned to give any inſtruction to phyſicians, but to make known to the patient what is neceſſary for the knowledge of her ſituation, that ſhe may perceive the neceſſity of a cure, and be tractable to the advice of ſuch as direct it.

Consequences of Labours.

Sect. 123.

The conſequence of labours depends on the mother's ſtate of health, her conduct during pregnancy, and her mode of living at all times. The only method of being as happy in this particular as the robuſt countrywoman, is to acquire her health, but that being impoſſible, the means I have found to procure happy conſequences to delivery for women, for whom I have had reaſon to fear in this period, are,

1. To avoid, in the laſt weeks of pregnancy, all that is over heating, in temper, meats, and drinks.

2. Daily exerciſe in open air till the time of delivery, unleſs ſomething eſſential prevent.

3. If they are of hot temperament, full ſtrong pulſe, and are accuſtomed to plentiful menſes,

menſes, they muſt be let blood eight or ten days before the time, and ſometimes during the labour.

4. The body ſhould be kept open during the latter end of pregnancy, not only by glyſters, but even by gentle purges. Pregnancy generally cauſes bad digeſtions: at firſt they have loathings and longings; they eat what is unhealthy, and the ſtomach operates badly. In a few months when the ſtomach recovers, the bowels are oppreſſed by the weight of the child, their functions are neceſſarily impeded; even the ſecretions of the bile ſuffer; it gathers, the matter corrupts and forms that putrid heat which I have aſſigned as a principle cauſe of the effects of bad labours. When before labour they have purgative evacuations, it prevents theſe evils.

5. To procure the ſame openneſs of belly after the labour by glyſters, or even laxatives, which are generally too much dreaded in that ſituation, and of which I have ſeen the good effects when given in proper time, and when it appeared neceſſary, in the firſt day of the in-lying; and ſo far are they from hurting the diſcharges which follow delivery, that they render them eaſy and regular, and prevent their ſuppreſſion and inflammation of the uterus, which is often the conſequence, by removing the irritation which cauſes them. But it is not here adviſed to purge upon all occaſions, and at all labours; many times it is unneceſſary, at other times does harm; but by numberleſs obſervations it has been found requiſite, where the ſymptoms appear to demand evacuation, purging may be uſed without any heſitation.

SECT.

Sect. 124.

The very means which contribute to good labours, contribute to prevent an effuſion of milk, and render it uncommon. When it is neceſſary, there ſhould be great care taken, and a variety of aſſiſtance given according to the circumſtances, which ſome day or other may perhaps be the ſubject of a pamphlet, in which I ſhall recount all the obſervations which I have had occaſion to make, and ſome not hitherto known; but here I ſhall confine myſelf to ſome important particulars.

The firſt is carefully, in the regimen and remedies, to avoid acids; tho' a ſtrong fever may ſeem to require them; but they are always prejudicial, at leaſt unleſs indicated by a complication.

The ſecond is, that as long as there is no gatherings made, but the milk is mixed with the maſs of humours, abſorbents joined to diluents and intermixed with ſome purges, are the beſt remedies.

The third is, as the nerves in theſe caſes are very delicate, and ſuſceptible of irritation or ſpaſms, all violent remedies ſhould be avoided.

The fourth is, nature being weakened by this milky humour, which ſometimes cauſes the palſy, or obſtructs the organs where it goes, it is often requiſite to call in the aſſiſtance of ſtrengtheners, notwithſtanding the fever; and even a very conſiderable fever, which, if it ariſe from a quite different cauſe, muſt be treated with cooling things. It has happened more than once, that for want of making this obſervation, phyſicians, otherwiſe ſkilful, have ſuffered their patients to languiſh many months under

under continual fevers, which nothing could aſſuage.

The fifth is, when there appear ſymptoms which ſeem to indicate an inflammation on ſome internal organ, nothing ſhould be neglected to remove it; the leaſt inflammation may draw the milky gathering to that part, which then will require ſtrong external applications to deſtroy it.

The ſixth is, ſometimes baths of mineral waters may be of great uſe, when all other remedies have failed.

Fluor Albus.

Sect. 125.

To treat copiouſly of the fluor albus would take as much time as the milky effuſions, but I muſt here likewiſe reſtrain myſelf to generals.

Sect. 126.

They are often the effects of bad digeſtions; the bad conſequences of which not being repaired by an active life, form a quantity of ſlimy matter and wateriſh blood, which cauſes habitually this running more or leſs plentiful or permanent: the chief ſymptoms of which are mentioned in ſect. 65. A dry regimen, much exerciſe, a long uſe of reſtoratives, and ſome purges, are the common remedies. It is principally in this claſs, which is the moſt common, that all hot waters are detrimental; and,

as the author of *Experimental Phyſic* remarks, the bad affects of coffee with milk or cream are inſtantly evident, a cure cannot here be effected without the patient abſtains from what is milky or oily, and from paſtry, and the great uſe of greens and fruits, which in theſe caſes are too relaxing and watery.

SECT. 127.

When they ariſe from a general bad ſtate of the maſs of humours, from a real cacochymia, they reſiſt all remedies; at leaſt if the cauſe is not removed, the diſorder would bring on an hectic fever, conſumption, dropſy, and death. Moſt happily this claſs is uncommon. A reeſtabliſhment of the foundation of health only, can give hopes of a recovery, and that is often difficult. An exact diet, and a few purges aſſuage the diſorder when incurable, and may be conſidered as a drain to a tainted body.

SECT. 128.

Sometimes copious floodings, frequent labours, and milky evacuations by the womb, leave a principle of weakneſs, which is the only cauſe of the whites. When mild reſtoratives continued long, chalybeate waters, and purges (for they cannot be cured without them) with cold baths, are very uſeful.

SECT. 129.

A fourth cauſe frequently productive of this diſorder, is what may be called a catarrh of

the uterus: this organ is habitually in the ſame ſtate as the membrane of the noſtrils and the lungs at the beginning of a rheum. Heat and heavineſs in the bowels, with ſymptoms of a tolerable ſtate of health, uſually accompany this ſpecies. Bleeding, warm baths, diluents, aſſes milk, and a mild regimen, often effect a cure; but hot and ſtrong things are hurtful.

Sect. 130.

In all theſe caſes care ſhould be taken to guard againſt aſtringents, which ſuppreſs the diſeaſe without deſtroying the cauſes, and have pernicious effects.

Mineral baths are uſeful in caſes almoſt deſperate.

This diſorder may be placed among thoſe which are hereditary; even ſometimes it appears very early: I have frequently ſeen it at the age of ſeven years, and once at three.

It is true, I could generally trace the cauſes of theſe early maladies in the mother, or faults of the regimen. They are ſometimes in young perſons preceded by diſorders in the bowels, which ceaſe when they appear; others complain of cholics when the whites are in ſmall quantity.

When they are ſuppreſſed or diminiſhed without their cauſe being removed, the conſequences are head-achs, coughs, and ſometimes the jaundice.

I ſhall finiſh this eſſay, (the omiſſions and imperfections of which I am ſenſible of) by repeating, that I am far from preſenting a project of reformation. It cannot be thoſe to whom it is moſt neceſſary—men to whom their ſituation,

ſituation, talents, reputation, long experience, and a well eſtabliſhed authority, give them the right of ſpeaking uſeful truths without fear of offence, with that energy which is neceſſary to perſuade. I like others, may behold with regret, perſons who, by their birth, employments, and education, are called to fill the moſt eſſential ſtations in ſociety, to whom they are dear, and whoſe health is as important as their influence might be powerful, are preciſely thoſe who enjoy the worſt, becauſe they continually labour to deſtroy it, by following a mode of life which is directly oppoſite to it, and which is ſo far from encreaſing their pleaſures, ſhortly deprives them of the very power of enjoying them, by throwing them into that ſtate which excludes all.—Is it poſſible that they can give themſelves up to illuſion in a point ſo eſſential? Are there any to whom it is indifferent whether they are well or ill? Can the inеſtimable benefit of health be ſo perfectly unknown to every individual in one rank of ſociety, as to be ſcarely deſired, or what is worſe, that languor ſhould be as attractive as the excreſcence on the throat is to the inhabitants of the Alps, or blackneſs to the Negro? This thoughtleſs exceſs is ſcarce credible; for ſure none but a malicious ſatyriſt can ſay *that it is not faſhionable to be well.* What faſhion is it but a faſhion which renders it impoſſible to be happy, and to diſcharge our duty properly? Never ought it to be received by any order of mechanics, much leſs by thoſe which are compoſed of perſons the moſt intelligent, who truly languiſh by error, not ſyſtem, and who will undoubtedly be happy in being diſabuſed. I ſhall congratulate

myself if the perusal of this essay should evince to any the danger of their manner of living, and recal them to one less detrimental, or engage other physicians better situated for the purpose, more able and eloquent than myself, to execute so necessary a work, of which this is indeed but the outlines.

BRITISH
23 JU 74
MUSEUM

FINIS.

T

D

M

P

A TREATISE ON THE DISEASES INCIDENT TO LITERARY AND SEDENTARY PERSONS.

By S. A. TISSOT, M. D.
Profeſſor of Phyſic at Berne.

Morbus eſt etiam aliquis per ſapientiam mori. PLIN.

Tranſlated from the laſt FRENCH EDITION:
With NOTES, by a PHYSICIAN.

EDINBURGH:
Printed by A. DONALDSON, and ſold at his Shop, corner of Arundel-Street, Strand, London, and at Edinburgh
MDCCLXXII.

BRITISH MUSEUM

TO THE

HIGH, ILLUSTRIOUS, AND MIGHTY LORDS,

THE

LORDS, CHIEF MAGISTRATES, TREASURERS, BANERETS and SENATORS, of the CITY and REPUBLIC of BERNE.

High, Illuſtrious, and Mighty Lords,

TO former bounties, your Excellencies have juſt now added one ſtill more conſiderable, by creating in my favour an office as honourable as unexpected. Having no other method of ſhewing my gratitude, permit me, High, Illuſtrious, and Mighty Lords, to offer you in this public manner, the imperfect expreſſion of it, and be pleaſed to accept with indulgence this firſt eſſay of my academical labours in the profeſſorſhip you have entruſted me with. May Providence proſper this eſtabliſhment, and pour down its moſt precious bleſſings on the republic over which you preſide, as well

well as on the persons of your Excellencies, the continuation of whose exalted benevolence I venture earnestly to desire.

I am; with the greatest respect,

High, Illustrious, and Mighty Lords,

Your Excellencies

Most humble and

Most obedient servant,

LAUSANNE,
April 26, 1766.

TISSOT.

THE

AUTHOR'S PREFACE.

IT was never my intention to have given this diſſertation in French, I had even prevented Meſſ. Didot and Graſſet from printing the tranſlations of it offered to them: beſides the faults in the work itſelf, which I had propoſed to correct in a new Latin edition, its oratorial form ſeemed to require that it ſhould remain in that tongue, the language of the men for whom it was drawn up. I have been obliged to alter my plan, and an abominable tranſlation of it publiſhed at Paris * has put me to the neceſſity of having it reprinted under my own inſpection, that I might avoid the ſhame of having written ſo bad a book as the one that was publiſhed with my name to it; and which is certainly not mine, although the tranſlator has endeavoured to perſuade the public that it was, by the following falſe declaration in an advertiſement at the beginning of this incom-

* *Avis aux Gens de Lettres & aux Perſonnes ſedentaires ſur leur Santé, traduit du Latin de M. Tiſſot Medicin, a Paris, chez J. Th. Heriſſant fils.* The work is not only much curtailed, but is ſo amazingly diſfigured, that in ſome places I hardly know it again; and the tranſlator ſeems generally to have miſtaken the ſenſe of the original, which in itſelf was faulty enough in point of order, neglect, inaccuracy and falſe print, without being additionally deformed with blunders againſt common ſenſe and the firſt elements of phyſic, ſwarming in the tranſlation. T.

plete

plete pamphlet, which I knew nothing of till I saw it mentioned in a catalogue: "M. Tissot "himself has been so kind as to look over this "translation; he has approved of the notes "which have been added, and we have made "use of his remarks with thankfulness *."

I at first only intended to have corrected it by the original, and just to have given a faithful translation of it; but this I found impossible: so that being obliged to throw it into a new form, I determined to insert all the corrections and additions designed for the new Latin edition; it may therefore be looked upon almost as a new work; but which will unfortunately appear to a disadvantage from the quickness it has been composed with, in the midst of continual interruptions: this, together with the sending away each manuscript sheet to the press as soon as it was finished, has been the occasion of many inaccuracies and repetitions in the language; for which I beg the reader's indulgence, who will certainly think that I stand in need of it, on many other accounts.

Although there are many writings extant upon the disorders incident to the learned, yet, I may venture to say, that the subject is still al-

* It were much to be wished that all translators would do what this one pretends to have done, and would consult the authors themselves, as most of the translators of the *Avis au Peuple* have been kind enough to do; the public and the author would both be benefited by it; but it is an affront which calls for reproof, for any one to give it out that it has been done, when it never has. I have just seen, with much concern, that this translation is reprinted in Holland, by Messrs. Rey, in the *Extraites des meilleurs Journaux de l'Europe*, combined with the *Journal des Scavans*, January, 1768. And I beg the favour of all gentlemen who are concerned in the Journals, to make my disclaiming of this translation known to the public. T.

most

moſt new; and I hope that experienced men will not find it quite the ſame, after having read this treatiſe. That of Ramazzini upon the ſame ſubject, and eſpecially ſome articles in one of the late M. Platner, are almoſt the only works in which we find it conſidered in ſome of its true points of light; but M Ramazzini had only repreſented a few of them, and M. Platner, who would certainly have exhauſted the ſubject if he had made it his buſineſs, has only touched upon it as it were by the by; and yet he ſeems to have been the author who had the beſt conceptions of it. The large volume publiſhed by the late M. Pujati, an eminent profeſſor at Padua, who has given us other excellent performances upon this intereſting ſubject, is nothing more than a compilation of general dietetic rules, without any new obſervation, or any circumſtance relative to the ſtate of the learned *.

I have endeavoured to point out all the particulars, with regard to health, which diſtinguiſh the ſtate of the learned from that of other ranks in ſociety, and have explained their effects as clearly as poſſible; I have concluded with directions which appeared to me beſt calculated to leſſen the dangers of this kind of life, which can never be ſo wholeſome as might be wiſhed; and I ſhall be well ſatisfied if that reſpectable part of mankind, which dedicates itſelf to the inſtruction of others, ſhould here be able to find ſome advice the obſervation of which may diminiſh the evils they are expoſed to by their profeſſions. They might perhaps themſelves contribute to make this work more perfect, if they would be kind enough to com-

* *Della Preſervatione della Salute de Letterati Venez.* 1762. T.

municate

municate the important obſervations they may have been able to make upon their own ſituation.

There is nothing new in the part concerning diet; almoſt all the advices I have given, may be found in all the authors who have written on the methods of preſerving health. But if we acquire eminence by publiſhing new truths, ſo on the other hand we make ourſelves uſeful by collecting thoſe which are known, for the benefit of the perſons to whom they are neceſſary; and ſurely one is as good as the other.

Although it becomes more and more the cuſtom to leave quotations out of French writings, yet I have preſerved them, becauſe they appear to me uſeful. Authors who exhauſt their ſubject, and leave nothing for their ſucceſſors to ſay upon it, may do without them; their works are complete buildings, which will never be touched again: but unfortunately this is not the caſe with me, any more than with many others, and therefore I think it right to produce quotations, that if any one ſhould chuſe to go on with the ſame taſk, he may find out more readily from whence information and aſſiſtance may be had. I have not done it in performances which are only the reſult of my own obſervations; but when we apply the remarks of others to our own uſe, there is certainly no impropriety in giving them the credit, by a few letters at the bottom of each page, where they cannot be inconvenient to any body.

LAUSANNE,
April 8, 1768.

N. B. The notes marked *T.* are the author's; thoſe marked *K.* are by the late Dr. Kirkpatrick; the others are by the Phyſician who wrote the notes on the Diſeaſes of People of Faſhion.

A TREATISE ON THE DISEASES OF LITERARY and SEDENTARY PERSONS.

GENTLEMEN,

HAVING had the honour of being appointed to introduce a ſcience into this univerſity, which, until the preſent time, had no eſtabliſhed profeſſor, I propoſed, on this firſt occaſion, to have obſerved the various relations which medicine has to the other ſciences, that have been taught here for many ages with great reputation and ſucceſs; and afterwards to diſplay both the advantages it derives from, and thoſe it reciprocally communicates to them.

It would have been moſt agreeable to me to declare, in this public manner, the many important precepts in which medicine coincides with religion; and entirely to have ſilenced thoſe ſhameleſs impoſtors, who have dared to calum-

niate the religious principles of phyſicians. My ſatisfaction would have been ſtill increaſed, by diſplaying the many lights reflected on religion by a ſcience, which, from a thorough ſcrutiny into the phyſical ſtate of the moſt perfect creature, from the admirable mechaniſm of a man in health, and perhaps the ſtill more ſurpriſing recovery of one from ſickneſs, eſtabliſhes the moſt unanſwerable demonſtrations of the exiſtence, and of the infinite wiſdom, of his Creator. Were it poſſible to ſuppoſe every notion of a Deity effaced in the minds of men, phyſicians would ſpeedily revive in them the ſublime ideas which their profeſſion affords them of that Eternal Being, of whom none (if a phyſician may be permitted to affirm it) have conceived and reaſoned more competently, or with greater impreſſion and dignity.

What a number of authorities might I quote in vindication of this ſentiment! I muſt not, however, omit our father Hippocrates, who firſt argued againſt the exiſtence of chance, and maintained, that all events which were called fortuitous, were directed by the will of the Almighty *. Neither muſt I omit Galen, a

* If the religious ſentiments of Hippocrates have been falſely called in queſtion by ſome, they have been as powerfully vindicated by others. John Stephano, a Venetian phyſician, publiſhed at Venice in 1638, a very intereſting work, entitled Hippocratis Coi Theologia, wherein he proves, that the tenets of this phyſician, as well as thoſe of Plato, Ariſtotle, and Galen, agreed much with the Chriſtian religion; and in 1688, M. Drelincourt gave a Greek oration upon the ſame ſubject, which has been tranſlated into French. At the beginning of this century, Mr. Grundling, profeſſor at Halle, publiſhed, under the title of Leiſure Hours, a collection of diſſertations in the German language, one of which was intitled Hippocrates Atheiſt; but M. Goelicke in his oration, and afterwards in his Hiſtory of Phyſic; M. Triller, in a Latin courſe, intitled Hippocrates falſely accuſed of Atheiſm, lately reprinted in the collection of his

a writer next in fame to Hippocrates, who has proved in a very circumſtantial manner, that the actions and uſes of the different parts which compoſe the thumb, are a ſufficient demonſtration of the exiſtence of a God; and who calls his book De Uſu Partium, &c. a monument erected to the glory of that Being *. Nor muſt Polychreſtus be forgotten, whoſe great piety recommended him to the glorious title of the "peculiar friend of God †:" nor Boyle, who not only wrote many excellent things himſelf, but alſo by a pious foundation bequeathed a large fund, in order to engage the moſt learned men in England through all ages, in defence of natural and revealed religion, againſt infidels and unbelievers. Should I not alſo mention his friend Sydenham, the modern Hippocrates; the immortal Locke; the great Boerhaave; and the celebrated Hoffman, a man

his Opuſcula, with conſiderable additions; Mr. J. Le Clerc, in his Bibl. Anc. & Moderne, t. 15, p. 428; M. J. A. Schmid, in a diſſertation printed at Helmſtadt (the Religion of Hippocrates;) and laſtly, M. Fabris, in ſome remarks in the 13th volume of his Bibliotheca Græca; have all of them ſo fully refuted theſe heinous accuſations of Hippocrates, that the uprightneſs of his religious ſentiments can no longer be called in queſtion. Wherever he ſpeaks of any thing relative to the Deity, he does it as a man filled with the moſt profound reſpect for that awful Being. Is it poſſible, indeed, that any perſon ſhould be more thoroughly convinced of his exiſtence than phyſicians are? Do they not behold him every where? and do not the wonders of his works fall every inſtant under the notice of their ſenſes? Perhaps it may even be ſaid, that divines meditate on God, and that phyſicians behold him. *T.*

* Galen ſeems quite as religious as Hippocrates; and although two paſſages are found in his works, one of which attempts to invalidate the proofs of Chriſtianity, the other ridicules the attachment the firſt Chriſtians had to their doctrine; it does not certainly follow from hence that Galen was an atheiſt, but only that he was not a Chriſtian. *T.*

† ΘΕΟΦΙΛΕΣΤΑΤΟΣ.

truly pious, though not entirely free from ſuperſtitious opinions? Neither muſt I paſs over in ſilence thoſe of our own time; amongſt whom Mr. Tralles, who has ſo completely refuted the ſophiſms of La Mettrie, certainly deſerves our notice *; as well as Mr. De Haller, who, with an energy peculiar to himſelf, has given us a diſcourſe upon the dangerous principles and fatal conſequences of irreligion; and has contraſted them with the fundamental truths and happy effects of Chriſtianity †. It is true, indeed, that the more enlightened phyſicians are, the leſs will they be liable to be infected with ſuperſtition, or the extravagances of popular enthuſiaſm, or to be ſeduced by the workings of a diſordered imagination, which any teacher may lay down as the rule of truth, becauſe it is his opinion. On the contrary, they laugh at theſe phantoms, and are not contented to embrace the ſhadow of truth inſtead of its ſubſtance. Hence ariſe the many accuſations, the many bitter invectives and calumnies, which have been always outrageouſly miſapplied to thoſe who have the leaſt deſerved them.

I ſhould have pointed out with no leſs ſatisfaction the ſtrict connections, nice dependencies, and perfect concatenations by which the ſcience of morals and that relating to health are reciprocally united; and ſhould have entered upon this track with the greater confidence, as it has been already trodden by our two greateſt maſters, Hippocrates and Galen. The firſt, in his ſmall treatiſe on diet, endeavours chiefly to prove, that the ſouls of all men are alike, and accounts for the difference obſervable in

* Anima humana, &c. *T.*

† *Diſcours ſur l'Irreligion, à Neufchâtel*, 1755. *T.*

their

their underſtandings, from the exceſs or moderation of their appetites.

The ſecond has ſucceſsfully demonſtrated the influence the various diſeaſes of the body have upon the faculties of the ſoul. There are now more than ſixteen centuries elapſed, ſince he deſired, that philoſophers, who were intruſted with the education of young perſons, would conſide ſuch as were irregular in their conduct to his care. "Let thoſe, ſays he, who doubt "whether ſome can be reſtrained, others ſpurred on, ſome become incontinent, others ſober, enterpriſing or timorous, mild, modeſt, "or moroſe, according to the difference of "their food; let them apply to me to ſettle "what diet may be neceſſary for them; and "they will ſoon find themſelves better diſpoſed "to natural philoſophy, and more capable of "improving the powers of a rational ſoul, "when I have ſtrengthened their ſagacity and "memory by theſe means, and that they are "become more knowing, and more ready to "apply. For beſides what relates to their "food or drink, I will alſo teach them the influence of the winds, the nature of the atmoſphere which ſurrounds us, and point out "to them thoſe places which are beſt adapted "to their conſtitutions, as well as thoſe which "they muſt avoid." * †.

How

* Quod animi mores, corporis temperamenta ſequantur, cap. 3. Charterius, tom. v. p. 457. *T.*

† The effects of a truly judicious diet and regimen, even in a ſtate of health, may poſſibly extend its influence to the mind; and co-operate, with good precepts and examples, to ſome improvement of the ſentiments and conduct of youth, as the paſſions may be rendered leſs active and rebellious, by the temperature of the blood. It is highly probable nevertheleſs, that Galen promiſed here to the very utmoſt of what he and food, ſuppoſing him to allow a ſufficiency of it, could effect; nor is

How largely ſoever I might have expatiated upon this ſubject, it would ſcarcely have been poſſible to take notice of all the connections which law and phyſic have with each other. If the legiſlator would compile a code of laws; or the judge on the bench decide any queſtions relative to civil, common, or eccleſiaſtical law; they will meet with many inſtances, in which they will be obliged to call in the principles of our art to their aſſiſtance; and to apply to that extenſive branch of phyſic commonly called the medicina legalis, or medicine of the bar.

It would be neceſſary to take a ſurvey of almoſt all the parts of natural philoſophy, ſhould we attempt to enumerate the various relations which medicine bears to this ſcience. The firſt philoſophers, who employed themſelves in the contemplation of nature, applied themſelves alſo to the cure of diſeaſes; and Pythagoras, Empedocles, Democritus, &c. were equally ſkilled in the great ſciences of medicine and phyſics. Hippocrates firſt diſtinguiſhed theſe two ſciences, not with intent to ſeparate them entirely, but only to reduce, into a ſmaller compaſs, an immenſe field of knowledge, ſufficient to occupy a number of well qualified men, and too extenſive to be ſufficiently cultivated by one;

it neceſſary to ſuppoſe our ſenſible author, who refers to him, believed the utmoſt of all he profeſſes here. We were intended by Providence for diverſe, though not for evil, characters; and nature will generally recur, in ſpite of diet, to her connate propenſities and paſſions; the regulation, not the extinction of which, is the object of education and philoſophy. Mr. Prior's dietetical argument in his Alma is very entertaining at leaſt, and not inappoſite here, whatever credit he might ſeriouſly allow it.

Was ever Tartar fierce or cruel,
Upon the ſtrength of water-gruel?
But who can ſtand his raging force,
When firſt he rides, then eats his horſe! *K.*

in

in which, however, each co-operator is ſtill to remember, that the ſpot he works upon is a part of one and the ſame whole.

That branch of natural philoſophy employed in the ſtudy of the body, conſidered merely as a body, has been diſtinguiſhed by the name of phyſics, while others have received their titles from the different kinds of bodies, which were the ſubjects of their various enquires. The human body is the object of medicine; and how uſeleſs is medicine without a knowledge of phyſics? Whoſoever is unacquainted with the powers and properties of bodies, and the laws of motion, will never be able to learn the art of healing: profeſſors of phyſic never deal with ſtudents ſo ill qualified. Now if medicine reaps many advantages from phyſics, it muſt alſo be allowed that phyſics are no leſs uſeful to the former; natural philoſophy having been much improved by phyſicians. Gilbert, an Engliſh phyſician, was the firſt who laid open the phænomena, of * electricity. The great Boyle, a doctor of Oxford, has enlarged the ſcience of phyſics more than any other man of letters; Boerhaave, in his experiments on the elements, has ſet this branch of knowledge in a new light; and to mention no more, the celebrated Muſchenbroeck, whom all the writers in phyſic conſider as their leader, has laid the foundation of his reputation in the practical treatiſes he publiſhed.

There is a connection between the ſtudy of medicine and that of languages, hiſtory and literature, which, though not quite ſo ſtriking, is by no means imaginary. What phyſician would

* We think, under correction, this ſhould have been magnetiſm; Gray having firſt written on electricity. *K.*

not

not be aſhamed of being unacquainted with hiſtory, or the belles lettres? What phyſician would relinquiſh the ſatisfaction of reading the fathers of the ſciences in their own language? or, who does not regret his being unable to read that of the Arabian phyſicians, of whom we have no faithful tranſlations extant?

Theſe ſciences alſo derive reciprocal aſſiſtances from that of medicine; which alone can clear up ſome obſcurities in hiſtory. Thoſe who wiſh to ſpeak pure and elegant Latin, are continually reading the works of Celſus, one of the moſt celebrated phyſicians among the ancients. Pliny, although he never practiſed phyſic, yet was well acquainted with it, and directed his ſtudies chiefly to the advancement of medical knowledge; and it has been juſtly affirmed of him, that his readers did not only find great aſſiſtance towards the knowledge of the Latin tongue in his writings, as in thoſe of other authors, but that even the whole of this language was contained in them. Aretæus, who is eſteemed a great proficient in the art of healing, was alſo well verſed in the Greek tongue. Galen has an eloquence peculiar to himſelf, as Alexander de Tralles has likewiſe; and the learned in the Arabic language ſay, that it is no where to be found ſo pure, as in the writings of the phyſicians.

It would ſeem at the firſt glance, from what I have advanced, that there were little difficulty in expatiating on ſuch a copious ſubject; but on a farther attention to it, I have been induced to think otherwiſe; and therefore leaving this elegant topic to men of ſuperior talents, I have choſen one from the practice of phyſic, which may pleaſe perhaps on its own account, and which only requires to be repreſented in a

plain

plain manner. The huſbandman talks of his oxen *, the ſailor of winds; but being invited as a phyſician to ſpeak before a learned body, I flattered myſelf with the hopes of engaging their attention, by an intereſting diſcourſe on the health of men of letters.

§ 2. It has long ſince been obſerved, that a cloſe application to ſtudy is prejudicial to health; and Celſus, after having informed men of learning of the dangers to which they are expoſed, by their immoderate attachment to it, has laid down ſome rules for guarding againſt them. Plutarch, that excellent judge of whatever is good and laudable, went farther by not only recommending to all learned men to attend to the rules of phyſic, but even to ſtudy medicine themſelves; for he thought it unreaſonable that they ſhould conſume their lives in enquiries frequently of little conſequence, while they neglected the ſtudy of health itſelf. They certainly do not know, ſays he, that this valuable art was for a long time a part of philoſophy; and that it is eſſentially neceſſary to thoſe perſons who macerate themſelves with much daily thinking, and with many ſleepleſs nights.

§ 3. The diſeaſes to which the learned are particularly expoſed ariſe from two principal cauſes, the perpetual labours of the mind, and the conſtant inaction of the body; an inveſtigation into the fatal effects of which cauſes will exhibit an accurate deſcription of their diſeaſes.

§ 4. Metaphyſical ſpeculation enquires into the cauſes of the influence of the mind on the body, and that of the body on the mind: medicine is engaged in leſs abſtruſe, but perhaps

* De tauris dicit arator, navita de ventis:
Quod medicorum eſt, promittunt medici. *T.*

in

in leſs uncertain reſearches; it does not attempt to diſplay the firſt cauſes of this reciprocal power in the two diſtinct parts of which man conſiſts, but confines itſelf to an attentive obſervation of the phœnomena that reſult from it. Experience inſtructs the phyſician, that ſuch a peculiar ſtate of the body muſt neceſſarily produce a certain correſpondent exertion of the ſoul; that ſuch emotions of the ſoul muſt unavoidably be attended with a reciprocal alteration in the body; and that, while the ſoul is abſorbed in thought, a part of the brain is kept in a ſtate of tenſion, which becomes fatiguing to it. Thus far only phyſicians extend their enquiries; and this indeed is all that is requiſite for them to know.

The connection of the ſoul with the body is in fact ſo ſtrong, that it is even difficult to conceive how one of them ſhould act, and the other not be ſenſible, in a greater or a leſs degree, of that action. The organs of ſenſe being put in motion, convey the ſubject of thought to the mind, by acting on the fibres of the brain; and while the ſoul is employed in thinking, the parts of the brain are in a greater or leſs forcible motion, and in a leſs or greater degree of tenſion. Theſe motions fatigue, the medullary or nervous portion of the brain; and this delicate ſubſtance, after a long courſe of meditation, becomes as much exhauſted as a ſtrong man is after exerciſe*. Whoever

* A ſtriking inſtance of this happened not many years ago to a gentleman remarkable for his accuracy in calculation; upon a wager, he lay down on a bed and wrought, by mere ſtrength of memory, a queſtion in geometrical progreſſion, while another perſon, in another apartment, performed the ſame operation with pen and ink: when both were done, he repeated his product, which was a line, conſiſting of ſixteen figures,

ever has thought intenſely, even once in his life, muſt have experienced this in himſelf; and there is certainly no very ſtudious man, who has not often felt, on coming out of his cloſet, violent pains in his head, attended with a great degree of heat in this part; this heat will depend on the proportion of wearineſs and inflammatory tenſion, which the medullary ſubſtance has undergone: the eyes ſoon become ſenſible of this fatigue; and if we conſider a man who is deeply engaged in thought, we ſhall ſee that the muſcles of his face are all upon the ſtretch, and ſometimes appear even convulſed. Plato has taken notice of the danger of fixing the attention too ſtrongly: "When the action of the ſoul is too powerful, "ſays he, it attacks the body ſo violently, that "it throws it into a conſuming ſtate: if the "ſoul exerts itſelf in a peculiar manner, on "certain occaſions, the body is made ſenſible "of it, and becomes heated and debilitated." Ramazzini, a famous Italian phyſician, has obſerved the ſame. "The union of the ſoul "with the body is ſo intimate, that they reci-"procally ſhare the good or evil which hap-"pens to either of them; the mind cannot "put forth its powers, when the body is tired "with immoderate exerciſe; and too cloſe an "application to ſtudy deſtroys the body, by "diſſipating the animal ſpirits, which are ne-"ceſſary to recruit it [*]."

figures, and inſiſted that the other gentleman was wrong, deſiring him to read over his different products, which being complied with, he pointed out the ſtep where his firſt miſtake lay, and which had gone through the whole:—he paid very ſeverely however for gaining his wager, as for a conſiderable time he had a ſwimming in his head, pains in his eyes, and ſevere head-achs upon his attempting to apply to figures.

[*] Opera omnia, p. 648. T.

That

That we may underſtand the influence the workings of the mind have upon the health of the body, we need only remember in the firſt place, the fact I have already mentioned; and which every perſon who thinks, and takes notice of his thinking, muſt be ſenſible of, viz. that the brain is in action during the time of thinking. 2dly, That every part of the body which is in action becomes weary; and that if the labour continues for any length of time, the functions of the part are diſturbed. 3dly, That all the nerves proceed from the brain, and exactly from that part of it ſuppoſed to be the ſeat of thinking, and called the *ſenſorium commune*. 4thly, That the nerves are ſome of the moſt principal parts of the human frame; that they aſſiſt in all its functions; and that whenever their powers are diſturbed, the whole animal œconomy muſt ſuffer. Theſe evident principles being once eſtabliſhed, every one muſt be ſenſible that when the brain is exhauſted by the action of the ſoul, the nerves muſt of courſe be injured; in conſequence of which, health will be endangered, and the conſtitution will at length be deſtroyed without any other apparent cauſe.

§ 3. Books wrote on trifling ſubjects can bring on no other inconvenience than loſs of time, and wearineſs of ſight; but thoſe which by the ſtrength and concatenation of ideas ſeem to raiſe the ſoul as it were above itſelf, and compel it to meditate, wear out the mind, and exhauſt the body; and the more we have been delighted with this meditation, and the longer it has been kept up, ſo much the more fatal will the conſequences be. M. De Monteſquieu obſerves, "that every thing becomes tireſome "to us in proceſs of time, and eſpecially thoſe "things

" things which give us the greateſt pleaſure: " the fibres which have been exerciſed by them " ſtand in need of reſt; others therefore bet- " ter diſpoſed to ſerve us muſt take their turn " of duty, that labour, by this means, may be " divided amongſt them *." M. Mallebranche was ſeized with a violent palpitation as he was reading L'Homme de Deſcartes; and there is now at Paris a profeſſor of rhetoric, who finds himſelf indiſpoſed at the reading ſome fine paſſages in Homer †.

§ 6. The brain, which is the immediate ſeat of theſe emotions, the nerves which ariſe from it, and the ſtomach, which is furniſhed with many nerves of an exquiſite ſenſation, are the parts firſt attacked, and commonly moſt injured by the immoderate labour of the mind; but if it ſhould continue for any length of time, almoſt all the parts of the body become partakers of the injury.

§ 7. M. Van Swieten ſpeaks of a man of letters whoſe health had been impaired by literary watchings ‡: whenever he liſtened with attention to any ſtory or trifling tale, he was ſeized with giddineſs; he was in violent agonies whenever he wanted to recollect any thing which had ſlipped his memory; he oftentimes even fainted away gradually, and experienced a diſagreeable ſenſation of laſſitude. There was ſtill a more troubleſome circumſtance attending this complaint; for whatever efforts he might make, it was never in his power to ſuſpend this involuntary recollection; but he was obliged to go on with it againſt his will, till at

* *Petit Porte-feuille*, p. 113. *T.*

† Lorry, De Melancholia & morbis Melanchol. tom 1. *T.*

‡ Theſe are what the ancients called Lucubrations. *T.*

length it made him quite ill †. M. Viridit, my fellow citizen, was acquainted with a woman who was ſeized with a violent fit of the colick, every time ſhe applied herſelf to any thing ‡; and a modern author ſpeaks of a man whoſe arm ſwelled conſiderably whenever he gave way to thought, or was ſuddenly affected by any circumſtance *. I was once conſulted by an Engliſh gentleman, who, during his ſtay at Rome, applied ſo cloſely to the mathematics, that after a few months he loſt the uſe of his eyes, although they ſhewed no outward appearance of injury. He made others read to him, but ſoon after his ſenſes were of no ſervice to him; ſo that he could not bear the moſt trifling converſation for the ſpace of a few minutes.

My friend M. Zimmerman gives an inſtance of a literary complaint of too intereſting a nature to be omitted. A young gentleman of Switzerland, ſays that learned phyſician, gave himſelf up entirely to metaphyſics; he ſoon perceived that his mind grew weary, which he endeavoured to conquer by cloſer application: this increaſed his diſorder; notwithſtanding which he ſtudied ſtill more earneſtly. This conteſt laſted for ſix months, and the diſeaſe increaſed to ſuch a degree, that the body and the ſenſes became injured. The health of his body was reſtored by medicines, but the mind and ſenſes degenerated in a manner almoſt imperceptible into a compleat ſtupor. Although he was not blind, he appeared not to ſee; al-

† Commentar. in Boerhaav. aphor. t. iii. p. 413. *T.*

‡ *Traité du bon Chile*, t. ii. p. 647. This work ſeems to be little known, although it appeared in 1735, not long before the death of the author; it contains a number of good obſervations, and is therefore worthy of more notice. *T.*

* *M. Bordeux Prix de l'Acad. de Chir. t.* vi. *p.* 199. *T.*

though

though he was not deaf, he ſeemed not to hear; and although he was not dumb, he never ſpoke a ſyllable. He ſlept however, eat and drank, without taſte, or without averſion; never aſking for food, nor refuſing it when offered. He was deemed incurable, and therefore no medicines were given to him; and he continued in this ſtate during the ſpace of a year. At the expiration of this term, a letter was read out aloud in his preſence; he ſtarted, complained inwardly, and put his hand up to his ear. This being obſerved, the perſon who was reading raiſed his voice; he then began to cry out, and diſcovered ſymptoms of exquiſite pain: the experiment was repeated, and he recovered his hearing by exceſs of pain. The other ſenſes were reſtored one after another in the ſame kind of way; and at the return of each ſenſe, it was obſerved that he recovered gradually from his ſtupidity; but his pains were ſo acute, and his ſtrength ſo far exhauſted, that he was for a long time in great danger of dying. At length nature prevailed almoſt without any aſſiſtance * of art; his health was entirely reſtored; and he is at preſent one of our moſt

* This recovery, with ſcarcely any medical aſſiſtance, is an indiſputable averment; and here an importantly medical query ariſes, viz. Whether this recovery, which we are informed, and find by the iſſue, was a compleat and perfect one, would have been the conſequence of much medical, or rather pharmaceutical aſſiſtance, which may certainly ſometimes more juſtly be termed *interruption?* The ingenious phyſician, from whom Dr. Tiſſot cites this extraordinary caſe, has manifeſted great judgment in ſubmitting the cure (after the cauſe was evident, and the further continuance of it removed) almoſt entirely, if not ſolely (though doubtleſs under a proper regimen) to the conduct of nature, whoſe own criſes, where her powers are not too much depreſſed for a liberal exertion of them, are very generally more compleat and elective, than our imitative ſubſtitutions for them by art. *K.*

length it made him quite ill †. M. Viridit, my fellow citizen, was acquainted with a woman who was ſeized with a violent fit of the colick, every time ſhe applied herſelf to any thing ‡; and a modern author ſpeaks of a man whoſe arm ſwelled conſiderably whenever he gave way to thought, or was ſuddenly affected by any circumſtance *. I was once conſulted by an Engliſh gentleman, who, during his ſtay at Rome, applied ſo cloſely to the mathematics, that after a few months he loſt the uſe of his eyes, although they ſhewed no outward appearance of injury. He made others read to him, but ſoon after his ſenſes were of no ſervice to him; ſo that he could not bear the moſt trifling converſation for the ſpace of a few minutes.

My friend M. Zimmerman gives an inſtance of a literary complaint of too intereſting a nature to be omitted. A young gentleman of Switzerland, ſays that learned phyſician, gave himſelf up entirely to metaphyſics; he ſoon perceived that his mind grew weary, which he endeavoured to conquer by cloſer application: this increaſed his diſorder; notwithſtanding which he ſtudied ſtill more earneſtly. This conteſt laſted for ſix months, and the diſeaſe increaſed to ſuch a degree, that the body and the ſenſes became injured. The health of his body was reſtored by medicines, but the mind and ſenſes degenerated in a manner almoſt imperceptible into a compleat ſtupor. Although he was not blind, he appeared not to ſee; al-

† Commentar. in Boerhaav. aphor. t. iii. p. 413. *T.*

‡ *Traité du bon Chile*, t. ii. p. 647. This work ſeems to be little known, although it appeared in 1735, not long before the death of the author; it contains a number of good obſervations, and is therefore worthy of more notice. *T.*

* *M. Bordeux Prix de l'Acad. de Chir. t.* vi. *p.* 199. *T.*

though

though he was not deaf, he ſeemed not to hear; and although he was not dumb, he never ſpoke a ſyllable. He ſlept however, eat and drank, without taſte, or without averſion; never aſking for food, nor refuſing it when offered. He was deemed incurable, and therefore no medicines were given to him; and he continued in this ſtate during the ſpace of a year. At the expiration of this term, a letter was read out aloud in his preſence; he ſtarted, complained inwardly, and put his hand up to his ear. This being obſerved, the perſon who was reading raiſed his voice; he then began to cry out, and diſcovered ſymptoms of exquiſite pain: the experiment was repeated, and he recovered his hearing by exceſs of pain. The other ſenſes were reſtored one after another in the ſame kind of way; and at the return of each ſenſe, it was obſerved that he recovered gradually from his ſtupidity; but his pains were ſo acute, and his ſtrength ſo far exhauſted, that he was for a long time in great danger of dying. At length nature prevailed almoſt without any aſſiſtance * of art; his health was entirely reſtored; and he is at preſent one of our moſt

* This recovery, with ſcarcely any medical aſſiſtance, is an indiſputable averment; and here an importantly medical query ariſes, viz. Whether this recovery, which we are informed, and find by the iſſue, was a compleat and perfect one, would have been the conſequence of much medical, or rather pharmaceutical aſſiſtance, which may certainly ſometimes more juſtly be termed *interruption?* The ingenious phyſician, from whom Dr. Tiſſot cites this extraordinary caſe, has manifeſted great judgment in ſubmitting the cure (after the cauſe was evident, and the further continuance of it removed) almoſt entirely, if not ſolely (though doubtleſs under a proper regimen) to the conduct of nature, whoſe own criſes, where her powers are not too much depreſſed for a liberal exertion of them, are very generally more compleat and effective, than our imitative ſubſtitutions for them by art. *K.*

learned philoſophers †. It is impoſſible to explain theſe phænomena otherwiſe, than by admitting the nerves to be affected, and by the influence the ſoul has upon them.

§ 8. Daily experience convinces us of the power of the ſoul upon the ſtomach. Thoſe moſt addicted to reflection, perform their digeſtion, *cæteris paribus*, with greater difficulty; on the contrary, thoſe who think little, generally digeſt well. We frequently ſee perſons of weak underſtandings eat and drink very freely, without ſuffering any inconvenience, although they lead ſedentary lives, and have not remarkably ſtrong conſtitutions. On the contrary, how many ſenſible men do we ſee, whoſe digeſtion is performed with much pain and difficulty, although they are of a good habit of body, and uſe ſome exerciſe. The ſame organiſation of the human body which renders vomiting one of the firſt ſymptoms of an injured brain, after a blow on the head, takes place in all irritations of that organ: the effect is always proportioned to the cauſe: and if it is an uncommon thing that the labour of the mind ſhould be carried to ſuch a height, as to produce inſtantaneouſly the ſame effects upon the nerves, as are occaſioned by a violent blow, yet there are ſtill ſome inſtances of this kind. A man of extraordinary genius, who has been extremely ſtudious, told me not long ago, that after having applied very cloſely for ſeveral hours together, as he found his imagination

† This obſervation is extracted from a chapter M. Zimmerman has inſerted in his Treatiſe on Experience in Medicine, upon the Effects of the Attention of the Mind; he took the trouble to tranſlate it for me after the firſt edition of this little work: the chapter is full of uſeful obſervations, which I ſhall hereafter have occaſion to make uſe of. *T.*

highly

highly worked up, he perceived that his head became ſuddenly weak, his ideas were all confuſed, he loſt his comprehenſion, became ſick, and vomited ſeveral times. Mr. Pome ſpeaks of a learned man who had ſo far weakened his ſtomach by ſtudy, that he vomited after every meal *. This unhappy conſequence of intenſe application has been more conſtantly obſerved than any other †. Ariſtotle was obliged to wear upon the region of the ſtomach a bladder filled with aromatic oil; and M. A. Antoninus had ſo far injured this viſcus, by the continual ſtate of extenſion in which his mind was kept, by the government of the empire of the world, and the cultivation of literature, that, according to the report of his firſt phyſician, Galen, he was ſubject to indigeſtions he could not get rid of, without faſting for four and twenty hours, and taking a glaſs of warm wine, in which a few grains of pepper were infuſed. The ſame author has handed down to us the ſtory of a woman, named Arria, whom he was very fond of, and who, by an aſſiduous application to Plato's Philoſophy, had ſo weakened her ſtomach, that ſhe could not take any nouriſhment, and was ſo debilitated, that ſhe could not ſupport herſelf any other way than by laying on her back ‡. M. Boerhaave, who lived long in a city where learning is much cultivated, ſays, that ſtudy begins by impairing the ſtomach; and that if the complaint is not relieved, it may degenerate into a melancholy. A famous Portugueſe phyſician uſed to ſay,

* *Traité des Vapeurs Hyſteriques, p.* 248. *T.*

† Diſorders in the ſtomach are often the conſequences of paſſions of the mind, and of none more frequently than of grief; yet there are inſtances where the ſame effects have been produced by too cloſe an application to agreeable ſubjects.

‡ De Theriaca, ad Piſonem. cap. 2. Charl. t. 13. p. 932. *T.*

that a vitiated ſtomach attends learned people, as ſurely as the ſhadow follows the body *. I have myſelf ſeen patients who have ſuffered for this immoderate thirſt of learning, firſt by a loſs of appetite, an entire inability of the digeſting powers, and a total debility which enſued; afterwards they have been tormented with ſpaſms, convulſions, and at length with a total privation of all their ſenſes.

§ 9. The injury the mind has done the body ſoon recoils upon itſelf; for it has been the will of the Supreme Being, that as long as theſe two ſubſtances continued together, the labours of the mind ſhould in a certain degree depend upon the health of the body: this truth has been ever acknowledged. Pliny the younger has emphatically declared, that "the props of "the body ſupported the ſoul †." And long before him Democritus had ſaid, "Health in-"creaſes the powers of the mind; when the "body is diſeaſed, the mind is not capable of "reflection ‡." It is not therefore ſurpriſing that the mind ſhould be weakened, after it has exhauſted the brain and debilitated the nerves. Plato indeed choſe an unwholeſome place for his lecture-room, thinking that if he was in leſs vigorous health, his mind would be better diſpoſed to reflection; but his conduct on this occaſion is not to be admitted as an objection to what has been advanced, being directly contrary to his general doctrine, and only relative to his own peculiar habit, which was rather bulky and inclined to fat; ſo that he was deſirous of having a fever, in order to become more lean. Neither ſhould it be objected that

* Amati Luſitani curat. Medicæ. p. 153. *T.*

† Epiſt. lib. 2. epiſt. 9. *T.*

‡ Epiſt. ad Hippocrat. Foes. t. 2. p. 1288. *T.*

ſome

ſome men of great learning are very ſickly; for if we examine attentively the ſtate of their health, we ſhall be convinced that the diſorders they have been ſubject to, have not ariſen from any affection of the brain or nerves, whoſe original powers are ſometimes ſo ſtrong, that they are but ſlightly diſturbed by the vitiated ſtate of the other organs, and remain capable of ſupporting the functions of the ſoul.

§ 10. The firſt ſymptoms which indicate a weakneſs of the nervous ſyſtem, are a kind of puſillanimity we were before ſtrangers to; diffidence, fear, grief, dejection and diſpiritedneſs: he who was the moſt intrepid man now becomes the moſt timorous; the ſlighteſt undertaking frightens him, the moſt trifling unforeſeen incident makes him tremble; the ſlighteſt indiſpoſition appears to him a fatal diſeaſe; and the idea of death fills him with intolerable horrors. Some tyrants have condemned certain philoſophers, whom they hated, to death, but have never been able to make them fear it; how much more effectually would their cruelty have been exerciſed, if by ſuffering them ſtill to live, they could have inſpired them with thoſe fears of death hypochondriacs are tormented with? We ſee inſtances every day of men of learning, who perceiving the firſt ſigns of this diſtemper, have been obliged to forſake their favourite ſtudies; whoſe nerves being weakened, they become incapable of attention; their memory fails: their ideas are confuſed; a ſenſation of heat in the head, palpitations, a total dejection, and the apprehenſion of death makes the pen fall from their hands. Quiet, nouriſhing food, and exerciſe, ſoon reſtore them to their former health; but as ſoon as they return to their books, they are again obliged to quit them. The day paſſes in

theſe alternatives; at night they are fatigued and caſt down; they go to bed, but their nights are much diſturbed; the irritability of their nerves prevents them from ſleeping, and oftentimes even from the power of thinking. I know a young man, who after having ſtudied very hard, could never open a book without being ſeized with convulſions of the muſcles of the face and head, which then ſeemed as if it were bound tight with cords. It would be needleſs to produce a greater number of examples, to ſhew the danger of intenſe application, and its fatal influences upon the nervous ſyſtem, ſince they would only ſerve to ſwell the volume, without affording any additional proof of the truth of the aſſertion, which has been already ſufficiently eſtabliſhed. "Study (ſays "M. Rouſſeau) makes men tender, weakens "their conſtitution, and when once the body "has loſt its powers, thoſe of the ſoul are not "eaſily preſerved. Application wears out the "machine, exhauſts the ſpirits, deſtroys the "ſtrength, enervates the mind, makes us pu"ſillanimous, unable either to bear fatigue, or "to keep our paſſions under *."

§ 11. The labours of the mind do not only weaken and irritate the nervous ſyſtem, but alſo produce diſorders of the nerves, which are ſtrongly characteriſed, and cannot be miſtaken. Galen knew a grammarian who was ſeized with an epileptic fit whenever he was intent upon teaching or thinking of any thing †. I have myſelf ſeen, and M. Van Swieten obſerves the ſame, very promiſing children, who have been forced to ſtudy ſo conſtantly by ſevere maſters,

* *Preface de Narciſſe, œuvres diverſes, t.* 1. *p.* 172. *T.*

† De Loci Affect. l. 5. c. 6. Chart. t. 7. p. 492. *T.*

that

that they have become epileptic during the reſt of their lives. M. Hoffman ſpeaks of a young man who was ſeized with a momentary fit, whenever his * mind or his memory were overloaded; as ſoon as he quitted his ſtudies, the palpitations ceaſed, and he recovered his health †. The famous Petrarch was afflicted in the ſame manner.

§ 12. An infinite number of other diſeaſes are brought on by ſtudy; beſides thoſe which immediately attack the nerves by diſturbing the ſyſtem. A celebrated mathematician troubled with an hereditary gout, and who was always a very regular man, haſtened the fit, by applying too cloſely to the ſolution of a difficult problem ‡. The uncommon accident which happened to M. le Chevalier D'Epernay is well known: after an aſſiduous application for the ſpace of four months, without any previous ſymptom of diſeaſe, his beard, his eye laſhes, his eye-brows, and in ſhort all the hair of his head and body fell off ‖. This phænomenon was certainly brought about by the little bulbs, which are the roots of the hair, being deprived of nouriſhment; and this might ariſe from three cauſes: 1ſt, from the powers of the ſtomach, the firſt organ of digeſtion and nouriſh-

* This rationally ſuggeſts, that the perſon affected thus might not be conſtituted by nature for a man of letters, tho' well fitted perhaps for ſome other purſuit. We may be certain, the proportion of people intended for ſtudy and contemplation, and of thoſe intended for various employments, even down to ſervitude, is very wiſely ordered by Providence, though we ſeldom form the calculation. As the condition of our exiſtence in this life requires more labour than ſpeculation or amuſement, it is doubtleſs very right that the unlearned ſhould conſtitute the majority in every ſtate.

† Medicin. Ration. de Epileps. § 19. *T.*

‡ Van Swieten, t. 4 p. 305. *T.*

‖ French Gazette, Feb. 23, 1763. *T.*

ment,

ment, being diſordered: 2dly, from the action of the nerves, which have ſo great a ſhare in nutrition, being diminiſhed, and which being employed by the ſoul, were inadequate to the functions of the body: 3dly, from that kind of ſlow fever men of letters are ſubject to, and which deſtroying the nutritious lymph, makes them become pale and thin, and often throws them into a ſtate of conſumption and decay. This fever is often produced by the irritation the heart receives from the too earneſt application of the mind, in conſequence of which its pulſations become more frequent.

§ 13. In order to conceive the effects of deep thinking, it may be conſidered as a ligature applied to all the nerves, which putting a ſtop to their action, brings on the ſame conſequences upon the whole machine, as a ligature applied more or leſs tight to the branch of a nerve, would induce on the parts to which that branch was diſtributed. Reflection exhauſts us alſo in the ſame manner as immoderate evacuations do, which waſte the body, deſtroy its powers, attenuate the humours, and produce a too great irritability of the nervous ſyſtem. Large bleedings, frequent purgings, ſalivations too copious, too great a flow of urine, in ſhort every immoderate evacuation, by weakening the tone of the veſſels, and ſubtracting too much from the quantity of fluids, prevents the nervous fluid or the animal ſpirits, on which the action of the nerves depends, from being properly prepared in the brain. Meditation alſo, by keeping the nerves too long in a ſtate of action, waſtes the ſpirits too much, and hinders the brain from preparing them; ſo that in both inſtances, this important fluid, the pureſt ſubſtance, and moſt highly prepared of any other

in

in the human body, and which is moſt neceſſary for the performance of its functions, is either deficient, or undergoes ſome alteration, which muſt inevitably produce many diſorders. There is, however, an eſſential difference between a debility of the nerves, cauſed by exceſſive evacuations, or the fatigues of the body, which are attended with the ſame conſequences, and that proceeding from the attention of the mind; which is, that the firſt of theſe cauſes does indeed for a time ſuſpend the ſecretion of this liquor, but does not diſturb the ſecretory organs; whereas the ſecond, to wit, the labours of the mind, affect the organ itſelf, as I ſhall explain more fully hereafter. The firſt takes from the manufacture ſome materials it ſhould work upon, the other attacks the manufacture itſelf; and theſe diſorders of the brain, the effects of immoderate application, are now to be the ſubject of our enquiries. They depend on three laws of the animal œconomy, which ſhall be ranged under ſo many heads.

§ 14. The firſt of theſe is that when the ſoul, from being employed a long time, has made too great an impreſſion on the brain, it becomes unable to reſtrain it; the action continues involuntarily, and re-acting upon the ſoul, fills it with ideas truly delirious, becauſe they are no longer anſwerable to the impreſſions of external objects, but only to the internal diſpoſition of the brain, every part of which is unfitted to receive any new images conveyed by the ſenſes. Spinello, a famous Tuſcan painter, having painted the fall of the angels, gave ſuch terrible features to Lucifer, that he was ſeized with terror in beholding them; and during the reſt of his life thought himſelf haunted by that devil, who was continually reproaching him for

for having repreſented him in ſo horrible a ſhape. M. Paſcal, a man of an uncommonly ſtrong mind, did ſo much injury to his brain by intenſe application and deep thought that he always imagined there was a gulph of fire near him; the conſtant agitation of ſome of his fibres conveyed this ſenſation to him perpetually; and his reaſon, ſubdued by his nerves, could never get the better of this idea. How many others are there who have been led beyond the limits of truth by an over-heated imagination? Gaſpar Barloeus, an orator, poet, and phyſician, was ſenſible of theſe dangers, and often uſed to warn his friend Hughens of them *; but he was notwithſtanding regardleſs of himſelf, and weakened his brain ſo much by exceſſive ſtudy, that he thought his body was made of butter: in this perſuaſion, he carefully avoided coming near the fire; till at laſt, wearied with continual apprehenſions, he threw himſelf into a well. For theſe twenty years paſt I have regretted the loſs of a friend, equally eminent in genius as well as character; a man calculated for great undertakings, whoſe ſtudies were divided between literature and phyſic, which he certainly would have improved; he was employed day and night in reading, reflecting, and making experiments; he firſt loſt his ſleep, then was ſeized with ſome tranſitory fits of lunacy, and at length became quite mad, ſo that even his life was preſerved with difficulty. I have ſeen other men of learning who have begun by being maniacs, and have at length become compleat idiots.

* He wrote the following advice to him: "Nec literas, nec "verſus reſcribe, ne in novum diſcrimen valetudinem dublam "adducas. Facile enim ex attentione incaleſcent ſpiritus, "hinc ſanguis, hinc habitus corporis." Barloei Epiſt. lib. 1. ep. 4. *T.*

I know

I know a man, ſtill more eminent by his virtues than by his high birth, who having applied himſelf for twelve ſucceſſive hours to draw up a memorial of the utmoſt conſequence, fell into a delirium after he had finiſhed it, which laſted 'till his ſenſes were compoſed with ſleep.

There are many obſervations of the ſame kind extant; and I have been told by a man of veracity, that Peter Jurieu, ſo famous for his theological diſputations, his controverſial writings, and his commentary on the Apocalypſe, had ſo far injured his brain, that although his judgment was ſtill preſerved in many inſtances, yet he uſed to affirm that his frequent colicks were cauſed by the fighting of ſeven knights ſhut up in his bowels. Others have imagined themſelves to be lanthorns; and ſome have been known to afflict themſelves upon the ſuppoſition of their having loſt their thighs.

The diſorders produced by the efforts of the mind fall ſooneſt upon ſuch as are inceſſantly engaged in the contemplation of one object; in this caſe there is only one part of the ſenſorium acted upon, and that is always on the ſtretch: it is not relieved by the action of the other parts, and therefore is ſooner fatigued and injured. If one, or only a ſmall number of muſcles, is continually kept in motion, the body ſuffers more than if the ſame quantity of action was ſucceſſively divided among all the muſcles: it is the ſame with the brain; when its different parts act alternately, it is not ſo ſoon weary; the part at reſt recovers itſelf, while the others are exerciſed: this change from labour to reſt, is the ſureſt method of preſerving the organ. I have ſeen a woman who appeared very ſenſible till ſhe was five and twenty; at which time of life ſhe unfortunate-

ly attached herſelf to the Moravians, and was ſo poſſeſſed with the love of Jeſus Chriſt, whom ſhe called her lamb, that ſhe could not admit any other idea; and without any other cauſe became an idiot in the ſpace of a few months; in which ſtate ſhe had no other recollection but that of her friend. I ſaw her almoſt every day during ſix months, and could get no other anſwer to my queſtions than theſe words, "my ſweet lamb;" theſe ſhe repeated every half hour, with her eyes caſt down. She lived ſix months in this condition, and then died of a * maraſmus. But without going any farther for inſtances, we have lately ſeen a ſtudent at this academy, a young man, who having taken it into his head that he could diſcover the quadrature of the circle, died mad at the Hotel Dieu of Paris.

§ 15. The ſecond law the human body is ſubject to, and on which many diſorders of the brain proceeding from ſtudy depend, is, that the humours are more abundantly derived to any part which is in action. Mr. Morgagni knew a learned man at Bologna, whoſe noſe bled whenever he happened to indulge in meditation before he roſe in the morning †. When the brain acts, it receives an additional quantity of blood, which increaſing the tone and motion of the veſſels, produces that ſenſation of

* Too many inſtances of ſuch dreadful infatuation, and even of more immediate ſuicide, from a ſuppoſed religious cauſe, might be referred to among the congregations of ſome modern ſectaries here: and theſe events are the more melancholy, by augmenting the number of ſuicides in a nation, ſuppoſed to be generally more addicted to this crime, than any other people in Europe. But above all, the writings of ſome eminent free-thinkers have not a little encreaſed what may be called *the Engliſh Malady*. K.

† De ſedibus & cauſis morborum, cap. 3. § 13. T.

pain

pain and heat before mentioned, beſides other fatal diſtempers, according to the various diſpoſitions of the brain, the blood, and the concurrence of other foreign circumſtances. Theſe diſtempers are. tumours, aneuriſms, inflammations, ſchirroſities, ulcers, dropſies, head-achs, deliriums, drowſineſs, convulſions, lethargy, apoplexies, and the want of ſleep, ſo frequently troubleſome to men of letters, which if it laſts, is generally productive of various diſorders both of the body and the mind. M. Boerhaave experienced this complaint for ſix weeks together, after a long ſeries of intenſe thinking; and during that time was in ſuch a ſtate of total indifference, that nothing could intereſt him *. Every perſon muſt have experienced that uneaſy kind of ſleep which comes on after fatigue, and is attended with a troubleſome ſenſation of tightneſs and weight in the head. A ſlight irritation of the brain is ſufficient to cauſe an inſomnium; a ſtronger irritation produces convulſions and comatoſe diſorders; the moſt violent degree of it brings on an apoplexy; a kind of death too common amongſt men of learning. They are puniſhed in the part which has offended: the double injury produced by application, of weakening the brain, and determining a greater quantity of fluid to it, brings on at length the moſt alarming diſeaſes, which generally manifeſt themſelves when other circumſtances concur in tranſmitting a great deal of blood to the head. Famous preachers and illuſtrious profeſſors have often been known to expire even in their deſks, which circumſtance happened at Leipſic to the celebrated Curtius. Livy has handed down to us the ſtory of king

* Prælection. ad Inſtitut. t. 7. p. 145. T.

Attalus, who, as he was adviſing the Bœotians to make an alliance with Rome, died in the midſt of his diſcourſe; and at Baſil, in an academic ceremony held there, one of the candidates, who had previouſly fatigued himſelf by a long courſe of ſtudy, exerted himſelf ſtill ſo violently during the ceremony in repeating his diſcourſe, that he was ſeized with an apoplexy, and died inſtantaneouſly †. I myſelf ſaw a worthy clergyman, who after having preached on a Whitſunday a long time, and with great energy, was ſeized with a tremor while he was giving the ſacrament, ſtammered, grew delirious, and then apoplectic; after which he grew childiſh, and lived for ſix months in that ſtate. M. Morgagni ſpeaks of a monk who died apoplectic in the midſt of his ſermon. Inſtances of this nature are frequent †: but the force of declamation is not always neceſſary to bring on apoplexies in ſtudious men; they happen ſometimes, when produced by no other cauſe than the diſpoſition the parts have been wrought into by the kind of life theſe men lead.

M. Zimmerman ſupplies me here again with another very intereſting obſervation. A Swiſs clergyman having raiſed himſelf a great reputation by his diſcourſes, was deſirous of keeping it up: he therefore read much, compoſed with a great deal of care, and exerciſed his memory much to learn his ſermons. By this continual attention of the mind he loſt his activity by degrees, his ſtrength waſted away, and the more he endeavoured to refreſh his memory, the more it failed him. At length he could not poſſibly retain his new ideas, although he ſtill preſerved the remembrance of the old ones;

† Felic. Plater. Obſ. p. 28.

and

and at laſt he was ſeized with an apoplxy, which made him paralytic on one ſide: he was carried to the baths of Baden in Switzerland, where he died, aged forty two years.

A profeſſor of Berne, well ſkilled in the oriental languages, a man ſtill in the prime of life, and a very hard ſtudent, became ſimple and childiſh: the cauſe of this accident was water collected in different parts of the brain *.

In the Conſultations of Wepfer we find the hiſtory of a young man of family, twenty-two years of age, who having applied himſelf inceſſantly to his ſtudies both day and night, fell into a delirium, which ſoon degenerated into a phrenzy, in which fit he wounded ſeveral perſons, and killed his keeper †. Even the catalepſy, that uncommon diſeaſe, ſometimes is brought on by too ſevere application; and Fernelius gives a very remarkable inſtance of it. "A man (ſays he) who paſſed whole nights in "writing and ſtudying, was ſuddenly attacked "with this diſtemper; all his limbs ſtiffened in "the attitude he was in when the diſeaſe firſt "ſeized him; he remained upon his ſeat, holding his pen, and fixing his eyes on his paper, "ſo that he was thought to be ſtill at his ſtudies, till being called to, and then ſhaken, "he was found to be without motion or ſenſation ‡." Walking in one's ſleep is another effect of the ſame cauſe. A ſtudent in phyſic at Leipſic, after having ſtudied with prodigious earneſtneſs for two months, entirely diſordered

* Haller Element. Phyſiol. t. 4. p. 377. A very circumſtantial and intereſting hiſtory of this diſeaſe is to be found in the ſame work of M. Zimmerman; but it is too long to be inſerted here. *T.*

† Obſervat. de Affect. Capit. Obſ. 85. p. 327. *T.*

‡ Pathol. lib. 5. cap. 2. Oper. Omn. p. 406. *T.*

his reſt, ſo that as ſoon as he fell aſleep, either in the night or day, he roſe and ſat himſelf down to ſtudy juſt as if he had been awake: he would look over his papers, take Caſtelli's Lexicon, ſearch for ſome words in it, ſeemed diſpleaſed when he thought he could not find them, ſmiled when he imagined he did; then wrote in very legible characters, after which he went to bed again, and his ſleep continued *.

Among the diſorders which this great flow of humours cauſes in the brain, let us not forget that it contributes much to form that unhappy diſpoſition which produces the hypochondriac affection; the fibres of the brain become weaker by being dilated, and are ſoftened ſo as to be unable to ſupport the different impreſſions; by theſe characteriſtics the nervous hypochondriac diſeaſe is pointed out.

§ 16. The third law of nature productive of other diſorders ariſing from the labours of the learned, is, the induration of the animal fibre by exerciſe.

The whole body becomes hard in proceſs of time, and old age itſelf is a general induration. In labouring men, thoſe parts moſt uſed in their reſpective employments grow callous; in men of letters, the brain itſelf is attacked in this manner, they become incapable of connecting ideas, and grow old much before their time. In children the brain is too ſoft, in old perſons too hard, and in the two extremes it is equally unfit to communicate the oſcillations excited by thinking. Galen has rightly obſerved, that our memory fails firſt †, and forebodes the weakening of our reaſon.

* Bohn ap. Hallerthes. medic. pract. t. 7. p. 439. T.

† De loc. affect. l. 3. cap. 5. T.

§ 17. The

§ 17. The nerves are not the only parts affected by deep thinking; for, as Gunzius has obſerved *, the wearineſs of the eyes is alone ſufficient to produce nervous diſeaſes. There is no one but muſt have experienced, as I have often done, how much the head is weakened by long attention of the ſight. If after a fever or other indiſpoſition, it ſhould happen to me, before my ſtrength is well recruited, to fix my eyes for a long time on any object, I am immediately ſeized with giddineſs, ſickneſs at ſtomach, and my whole body ſuffers a painful ſenſation of being fatigued and exhauſted.

§ 18. I mean not to diſcourage people from ſtudy; I mean rather to be uſeful to ſtudents, in laying before them the dangers they are expoſed to from immoderate application. Some, however, may imagine ſo, and may therefore undertake to defend it, by quoting examples of many learned men, who have arrived to an extreme old age, ſound both in body and mind. I am not unacquainted with theſe inſtances, ſome of them, beſides thoſe I have read of, having fallen within the ſphere of my own knowledge: but this privilege is not given to all; few men are ſo happily conſtituted as to ſupport ſuch laborious occupations without ſuffering for it; and indeed who can go ſo far as to ſay, that theſe would not have lived longer, if they had given themſelves up to ſome other kind of buſineſs? It muſt be allowed indeed, that moſt of the greateſt men human nature has produced, have lived to a very great age; ſuch as Homer, Democritus, Parmenides, Hippocrates, Plato, Plutarch, the Lord Chancellor Bacon, Aldrovandus, Galileo, Harvey, Wallis,

* Ad libellum Hippocrat. de humorib. p. 211. *T.*

Boyle,

Boyle, Locke, Leibnitz, Newton *, Boerhaave; but can we infer from hence, that the labours of the mind carried to exceſs are not prejudicial? Such a concluſion is evidently falſe; although we may conjecture, that there are men formed as it were on purpoſe for theſe ſublime indulgencies, and that the happy diſpoſition of the fibres conſtituting great men, is perhaps the ſame which leads us on to old age. "Mens "ſana in corpore ſano"

Beſides, the immortal name theſe great men have acquired, ſeems rather owing to the force of their genius, than the aſſiduity of their labours. The leiſure hours and avocations which muſt neceſſarily have attended men of ſuch conſequence, as well as the duties their ſituation obliged them to fulfil, were ſo many diverſions, which repaired the injury they might have received from ſtudy.

Theſe obſervations muſt certainly recall to your minds that reſpectable man, who lived during the ſpace of fifty years the honour and the delight of this academy and this city †. His whole life had been employed in cultivating the ſeveral branches of literature; he had made himſelf a perfect maſter of thoſe relating to his own profeſſion, which was a very extenſive department; and was alſo ſkilled in every one of the other ſciences. A knowledge ſo comprehenſive implied his having taken great pains, nevertheleſs his health was not in the leaſt impaired; yet he lived to the age of fourſcore and ſix years, without loſing the power of his genius or the quickneſs of his underſtanding. Can this example be produced as an objection to what has been ſaid? Certainly not; on the

* Newton outlived himſelf, if we may be allowed the expreſſion, becoming perfectly ſilly and childiſh before his death.

† M. Polier Prof. in Catacheſis, and oriental languages. *T.*

contrary,

contrary, a more particular account of his method of paſſing his time, will induce you, gentlemen, to think he was a fit model to be propoſed to the imitation of all the learned. His great learning never made him forget that he was a man: he acquired the knowledge of a great variety of the moſt abſtruſe ſciences without neglecting the ſocial duties, and fulfilled the offices of citizen, father, profeſſor, friend, and member of ſociety, as a man of the world whoſe time was not otherwiſe taken up. When his mind was wearied with application, he recruited it by moderate exerciſe in his garden: his behaviour in all circumſtances was chearful and pleaſant, a qualification not to be kept up but by mixing ſocially and benevolently with mankind. If we compare this with Mr. Fontenelle's manner of living, whoſe name ſtands one of the foremoſt among the liſt of ſuch men of genius as have arrived to a very old age, we ſhall be convinced, that he could not have lived ſo long without any infirmity, if he had not blended the comforts of ſocial life with his literary occupations. Theſe lives were in nothing ſimilar to thoſe of the Eruditi, a race of men ſcarce known among the ancients, who firſt ſhewed themſelves at the time that literature was in its decline, and appeared again at its reſtoration. Theſe men, fixed to their work as the needle to the pole, might be compared to ſome of the Indian Fakeirs; for like them they ſeclude themſelves from mankind; and mortify themſelves oftentimes, without adducing the ſlighteſt advantage to ſociety from their voluntary ſufferings. The difference is only in the means they torment themſelves with: the Fakeirs expoſe themſelves to the ſcorching heat of the ſun,

and

and the moſt extreme ſeverities of cold; they tear themſelves with nails, chains, and whips; while the others deſtroy themſelves with books, manuſcripts, medals, antique inſcriptions, and inexplicable characters; and eſpecially in giving way to that total inaction of the body, which is the ſecondary, and unfortunately the too frequent cauſe of the diſeaſes incident to men of letters, the dangers of which will be made evident from conſidering the ſtructure of the human body.

§ 19. The human body is compoſed of veſſels which contain fluids conſtantly circulating. When the veſſels have neither too much nor too little power; when the fluids are of a proper conſiſtence, and their motions neither too rapid nor too ſlow; then the body is in perfect health. But it is neceſſary to take notice, that the motion of the blood is what concerns us moſt at preſent. Whenever that alters, the other fluids and the ſolids are alſo changed: if it is too violent, the ſolids grow hard, and the fluids become thick; if too weak, the fibres are relaxed, and the blood is attenuated. The whole body is formed and preſerved by the chyle, which is lighter than any other ſolid or fluid part; motion aſſimilates, unites, and inſpiſſates its globules; and if by any means that motion ſhould be retarded, the different parts of the body cannot acquire a degree of ſolidity and firmneſs ſufficient for their ſeveral functions.

The heart is the firſt principle of motion; it gives the impulſe to the whole maſs of fluids, but is not of itſelf ſufficient to keep it up; it has therefore been ſupplied by the Author of nature with a number of helps: whenever theſe fail, the circulation is ſlackened, and many diſ-

orders

orders enſue. One of the moſt effectual powers deſigned to aſſiſt in propelling the blood and increaſing the action of the veſſels, is muſcular action. The common practice of giving a patient after bleeding ſomething to be moved about in his hand, in order to accelerate the motion of the blood, is a ſufficient proof of this; and one ſtill more evident may be deduced from obſerving the effect of motion on the pulſe. The chief advantages of exerciſe are, that it ſtrengthens the fibres, preſerves the fluids in their proper ſtate, procures an appetite, facilitates the ſecretions, and eſpecially perſpiration, raiſes our ſpirits, and produces an agreeable ſenſation in the whole nervous ſyſtem.

§ 20. On the contrary, the effects of a too ſedentary life are ſuch as deſtroy the ſtrength of the muſcles, and render them, for want of uſe, unable to bear action: the circulation, therefore, deprived of this conſiderable aſſiſtance, and carried on by the powers of the heart and veſſels only, ſoon grows languid in the ſmaller veſſels, and at length in the whole courſe of the body. Vital heat diminiſhes; the humours ſtagnate, and become vitiated; ſome are attenuated, others thickened, all undergo ſome alteration; and the ſecretions and natural evacuations not being well performed, the body remains loaded with excrementitious humours, the regular expulſion of which is the ſureſt preſervative of good health: the acrimony of theſe humours gradually preys upon the conſtitution, ſtrength is diſſipated, and the blood becomes watery; hence ariſes the dropſy, ſo common to men of letters, which ſometimes attacks the brain, as we have before obſerved, and of which I have lately met with a freſh inſtance in a worthy magiſtrate, who had

had ruined a ſtrong conſtitution, not by ſtudy, but by labours of the mind of a more diſagreeable nature, and by a ſedentary life.

This effuſion of water in the brain has been noticed by others. M. Van Swieten deſcribes its effects with energy and accuracy. "Men "of letters (ſays he) who lead a ſedentary life, "and ſicken over their books, are on this ac"count often expoſed to an apoplexy, which "creeps upon them ſlowly and as it were by "degrees. At firſt they become languid; "they delight in eaſe and indolence; their un"derſtanding grows dull; their memory de"cays and fails them; they then grow heavy, "ſleepy, and ſtupid, and often remain long in "this wretched ſituation before they die. It "has given me much concern to ſee learned "men of the firſt claſs, who had been very "ſerviceable to literature, live more than a "twelvemonth after the loſs of their faculties, "forget every thing, and at laſt die of an a"poplexy *."

§ 21. The want of exerciſe produces its effects firſt upon thoſe veſſels which are naturally weak, and therefore require the more aſſiſtance to keep up the motion of the fluids in a proper degree of velocity; ſuch are eſpecially the viſcera of the abdomen, deſigned for the important functions of digeſtion. The ſtomach grows feeble, the juices inſervient to digeſtion ſecreted in it are altered, digeſtion is languid, troubleſome, and imperfect, becauſe the digeſtive powers being leſſened, the food cannot undergo the neceſſary changes; on the contrary, they become putrid, as they would in any other place where they were expoſed to the ſame de-

* T. 3. p. 263.

T. gree

gree of heat and moisture. The vegetables depoſit their * acid, which irritating the nerves, produces pains, cramps, a ſourneſs, which brings on a perpetual ſenſation of heat at the pit of the ſtomach and in the throat, called the heart-burn, and the teeth are ſet on edge, &c. The fat grows rancid, the eggs and meats become putrid, from whence ariſe nauſeæ, parching thirſt, a ſlow fever, perpetual diarrhœas, a general debilitation, and a ſenſation of uneaſineſs not to be expreſſed. The ſaponaceous juice conſtantly exhaling from the ſmall veſſels of the ſtomach, not only loſes its power of diſſolving the aliment, but being itſelf inſpiſſated, gluiſh, and hard, is collected into lumps, which deſtroy the appetite, and occaſion a continual ſenſation of cold and weight in the part.

§ 22. The inteſtines, whoſe organization is the ſame as that of the ſtomach, are liable to the ſame accidents; and reſpiration, which when ſtrong, during the act of inſpiring, preſſes on the contents of the lower belly, and thereby aſſiſts the circulation in them; the action of reſpiration, I ſay, being greatly ſlackened from the want of muſcular exertion, by which it is powerfully excited; theſe organs become weak, coſtiveneſs enſues; collections of ſlimy matter, common among learned men, are formed as in

* I muſt not omit obſerving, that Dr. Tiſſot is not diſcouraging his ſtudious readers here from the uſe of vegetables, but only declaring the bad effects of too intenſe and unremitted ſtudy, without ſufficient corporal exerciſe, be their diet what it will: and yet in fact a conſiderable proportion of vegetable food (when there is no ſtrong antipathy to, nor conſequent diſorder from vegetables) ſeems highly proper for thoſe, whoſe inactivity and debility render their ſtomachs leſs adequate to a proper comminution of more fibrous and tougher animal food. It will be a very ſalutary caution to obſerve in ſuch circumſtances, that their vegetables ſhould be boiled rather very well, than very faſhionably, *K.*

the ſtomach, from whence many diſeaſes are derived. This happened to Juſtus Lipſius, profeſſor of hiſtory, who tho' adviſed by his friend and collegue the celebrated Heurnius, yet he ſuffered for a long time, and was not cured till he had voided a maſs of the form and colour of the inteſtines. It was a kind of gluiſh viſcous ſubſtance, formed by his ſedentary life, which had gradually filled up the inteſtinal tube; and becoming putrid, had diſordered the whole animal œconomy; but the cauſe being deſtroyed, the patient was ſoon reſtored to health *. The excrements thus heaped up, preſs upon the neighbouring parts by their bulk, irritate the inteſtines by their acrimony †, and infect the whole maſs of fluids by their putrefaction: from hence thoſe excruciating colicks, the torments of learned men, which are the more difficult of cure, as they are inceſſantly renewed by errors in diet ‡: from hence thoſe flatulencies, the conſtant attendants of ſedentary perſons, which bringing on a variety of ſymptoms, may ſometimes be miſtaken for other diſorders.

§ 23. The ſtomach and inteſtines are not the

* Adam vitæ medicorum, p 372. Fernelius takes notice of a diſeaſe exactly ſimilar to this, which attacked a foreign ambaſſador at Paris, who was cured, as Juſtus Lipſius was, by evacuating a prodigious quantity of hardened ſlimy matter. *T.*

† From good authority, the following fact came to hand: A young perſon of a ſtudious diſpoſition, and who, during ſtudy, ſat much inclined, and on a low ſeat, died after three years complaining of colicks, &c: upon opening the body, there was found a conſiderable collection of hardened fæces in the caput coli, the whole of the adjoining inteſtines in a morbid ſtate, and ſeveral calculi in the gall-bladder.

‡ In the Journal de Medicine. t. 1. p. 352, we find a very intereſting account of a ſevere colick, cauſed by application and continually ſitting up at night, and which returned very frequently. *T.*

only

only ſuffering viſcera of the abdomen; the reſt being in the ſame ſtate of inaction, are liable to ſimilar complaints. The pancreatic juice thickens and becomes uſeleſs; the functions of the ſpleen are diſturbed; and the organs, which ſecrete and prepare the bile, are entirely diſordered; the bile ſtagnating obſtructs the liver, becomes inſpiſſated and hard, is no longer conveyed into the duodenum to aſſiſt in ſecondary digeſtion, the chyle ſtagnates in the ſmaller inteſtines, is vitiated, and theſe parts become the ſeat of the moſt alarming diſorders. The portion of bile incloſed in the gall-bladder, in order to go through another proceſs, which makes it of greater efficacy, thickens in the part, and forms calculi, commonly called *gall-ſtones*; from whence proceed the moſt excruciating colicks *, which admit of no cure till the ſtones can paſs into the bowels, and be carried off by ſtool. When they are either too large to paſs through the ductus choledochus, or that the neceſſary propelling powers, or the circumſtances requiſite to facilitate their iſſue are deficient; or when they are ſituated in parts from whence they cannot find a paſſage, as it happened to St. Ignatius Loyola, who had them in the vena portarum †, the afflicted perſons muſt ſuffer throughout the courſe of their lives, and at laſt expire in torments. If, inſtead of growing hard, the bile ſhould putrify, it acquires an exceſſive degree of acrimony, which irritates, gnaws, inflames, and ulcerates all theſe organs, and is productive of the moſt terrible diſeaſes,

* Vide Tiſſot on the Diſeaſes of People of Faſhion, § 116. Inſtances of theſe calculi are ſo frequent, that every practical anatomiſt can give many remarkable caſes from their own experience.

† His body was opened by Columbus the famous reſtorer of anatomy, Van Swieten, vol. 3. p. 83. T.

inaſmuch as they are accompanied with the moſt violent agonies; ſo that I have ſeen men of letters, poſſeſſed of the ſtrongeſt reſolution, reduced by them to a ſtate of deſperation they were aſhamed of, in moments which afforded them ſome little reſpite.

§ 24. The hypochondriac diſeaſe may alſo be reckoned among the evils learned men are expoſed to from that kind of inactive life, which diſturbing the circulation in the abdominal viſcera, produces obſtructions in them. This complaint is of two kinds; one entirely nervous, which we have before obſerved to be the effect of attention; another, wherein the contents of the lower belly are all ſtuffed up, and the powers of digeſtion diſordered. The conſtant cauſe of this is a life of inactivity; and we may eaſily account for the frequency of theſe diſeaſes among men of letters, from ſuppoſing a concurrence of theſe two cauſes, which will alſo render them leſs ſuſceptible of a radical cure *. Inſtances of theſe caſes are ſo common, that it may be needleſs to adduce any: if, however, one ſhould be expected, I ſhall produce that of Swammerdam, that accurate obſerver of nature, who was ſo tormented with an atrabilarious complaint, that he ſcarce gave any anſwer to thoſe who aſked him queſtions; he only looked at them, and remained motionleſs. When he got up into his deſk, he was oftentimes fixed and aſtoniſhed, as if he had been ſpeechleſs, and took no notice of any objections made to him. Not long before his death he

* *Ci dimoſtra l'eſperienza che i litterati ben che foſſero di gievale temperamento, diventano a longo andare ſiſſi, taciturni, pallidi, macilenti & ſtranamente beſſaghati da paſſione ipocondriaca, tirama conſueta di gente ſtazionaria.* Anton. Felici Diſſertazioni Epiſtolar. p. 203.

was

was ſeized with a melancholy madneſs, and in one of the paroxyſms burned all his writings; he at laſt periſhed, thin and dried up as a ſkeleton, ſcarce preſerving the appearance of human form *.

It has been long ſince obſerved indeed, that this kind of melancholy may be uſeful to learning, becauſe melancholy perſons, being fixed to one idea, are able to conſider the ſame object in all its views, and without having their attention diverted. But can any man be ſo far out of his ſenſes, as to wiſh the perſpicuity of his judgment to be increaſed by ſuch means? Learning, when exchanged for health, is certainly purchaſed at too high a rate; and ſcience becomes uſeleſs if it deprives us of happineſs.

Nature indeed has provided ſome men with ſuch athletic ſtomachs, ſtrong nerves, and as it were bowels of iron, that they can bear the labours of the mind, and a ſedentary life, and can indulge in all kinds of exceſs without diſordering their digeſtion; but they are not exempt from other diſeaſes; their veſſels are filled with too great a quantity of blood; the cells containing the fat are choaked up, the internal parts are compreſſed on all ſides, and they become heavy and ſlothful; they are thrown into a ſweat by the leaſt motion, and are ſoon out of breath; they die at an early time of life, either by an apoplexy, a ſuffocating catarrh, or ſome one of the many diſeaſes occaſioned by a plethora; ſo that it has been juſtly obſerved, to be oftentimes an inconvenience to men of letters to have too ſtrong a ſtomach †.

§ 25. A ſedentary life weakens the whole

* Boerhaave Prælect. ad Inſt. § 896. t. 7. p. 275. *T.*

† This obſervation is of Lanciſi de Mort. Subitan. lib. 1. cap. 22.

ſyſtem of the animal œconomy. When the blood is once in a vitiated ſtate, it injures, ſooner or later, all the parts it circulates through. The lungs, whoſe ſubſtance is extremely delicate, the firſt part to which the chyle is conveyed, and through which the whole maſs of blood paſſes, in order to undergo ſome important change, ſoon feel the effects of the depravity of this fluid; heats are felt in the breaſt, pains between the ſhoulders; a cough, and troubleſome ſpittings come on; the lungs are filled with a tough viſcid ſubſtance, which forms obſtructions, and often brings on an aſthma; inflammations, ſuppurations, and abſceſſes are formed, and a hectic fever enſues. The famous Triglandius, after having ſuffered great pains, died of an abſceſs in the lungs, proceeding from a cachectic diſpoſition his ſtudies had brought him into, and which could not be removed, even by Mr. Boerhaave's care and attention *. Swammerdam uſed to ſpit up ſmall ſtones long before his death, and his lungs were found full of them.

§ 26. Intenſe ſtudy produces alſo the ſtone and other diſeaſes of the bladder †. Heurnius, Caſaubon, Beverovic, Sydenham, and many others, are melancholy inſtances of this; and no body is unacquainted with the ſufferings which the illuſtrious ‡ antagoniſt of the ſciences is expoſed to from complaints of this nature.

* Marekii Orat. funebr. in obitum Triglandii Leip. 1705.

† Many diſorders ariſe from too long a retention of urine, palſies of the bladder, inflammations and other diſorders of its ſphincter; and as we ſee that in a great number of people, a calculous cruſt is formed in their urinal; may we not reaſonably ſuppoſe the ſame thing to take place in the bladder, when from long retention, and their inactive life, a ſeparation is allowed to take place; which would not have happened, had they by exerciſe, or more frequent evacuation prevented it.

‡ This probably is intended for Mr. Rouſſeau.

§ 27.

§ 27. Another fatal conſequence of a ſedentary life, is the leſſening of inſenſible perſpiration, the preſervation of health depending much on the regularity of this copious and important evacuation. The veſſels through which it is conveyed, are ſmall and weak, very diſtant from the heart, and much expoſed to external injuries. It muſt therefore neceſſarily be interrupted, unleſs the circulation is aſſiſted by muſcular action, and unleſs that power is ſufficiently exerciſed to enable the veſſels to propel their fluids in ſuch a manner, that the ſecretions may be properly prepared and expelled through the reſpective outlets nature has appointed for that purpoſe. As ſoon as this perſpiration becomes obſtructed, the redundant humours it ſhould have cleared the body of are retained, corrupt the maſs of fluids, depoſit themſelves upon ſome organ, and produce pains and defluxions. From hence alſo that phlegm ſo common to the learned, of which Horace complains ſo much, which, after reading for a long time together, often produces coughs and ſtoppages of the noſe, more or leſs troubleſome; and laſtly, irregular fevers are brought on, not to be traced from any other cauſe, of which Galen has preſerved a remarkable inſtance in the caſe of Premigenes: "This famous Peripa-
"tetic philoſopher, who paſſed all his time in
"writing and reading, and whoſe perſpiration
"was therefore defective, was ſeized with a
"febrile paroxyſm every day when he neglect-
"ed to bathe; but the bath carried off this
"acrid humour, which when kept in occaſi-
"oned the fit *.

§ 28. We have ſeen that the nerves are im-

* Galen de ſanitat. tuend. l. 5. cap. 11.

mediately

mediately affected by the labours of the mind; inactivity is alſo ſufficient to deſtroy them, and often produces this effect, even in perſons whoſe mind is as indolent as their body. The nerves are the principal parts of the machine; whenever any of the animal functions are diſturbed, they muſt undoubtedly be injured. When I have ſeen the nerves affected without any ſenſible cauſe, I have often been led to ſuppoſe that ſome diſeaſe would ſoon appear, the ſource of which might poſſibly be diſcovered by attentive obſervation, and be the more eaſily deſtroyed before the diſeaſe had come to any height. Some diſorders, of the ſtomach, eſpecially ſhew themſelves more readily by the effects they have on the nerves; for they being a kind of medium * between the ſoul and the body, are expoſed to ſuffer from the irregularities of each, and communicate to the one the injuries they receive from the other: thus it is that the ſoul becomes prejudicial to the body, and the body hurtful to the ſoul, and that they are both combined in deſtroying the nervous ſyſtem.

§ 29. The ſeminal fluid which many great men have thought to be ſimilar to the nervous juice, partakes of the general diſturbance, and loſes much of its active power. If we argue from this poſition, and conſider at the ſame time how much each part of the father contri-

* Doubtleſs theſe cords, with their impalpable contents, conſtitute the nexus, the immediate link, of this further impenetrable union of mind and matter; whence their reciprocal influences ariſe, and thought itſelf is materialized into an object of ſight, and communicated by ſound. The continual inſtances of this amazing hypoſtaſis ſeem, among the vulgar, to have annihilated this unveilable myſtery; ſo that, as one of our dramatic writers expreſſes it, "prodigies, from their frequency, have loſt their name." A.

butes

butes to the formation of the ſon, we may perhaps find out the reaſon why it ſo ſeldom happens, that men of great learning are bleſſed with children worthy of their parents. The animated particle which Harvey calls *the punctum ſaliens*, does not open itſelf in the firſt inſtance with ſufficient ſtrength; the effects of this primary weakneſs are carried through life; and the impreſſion falls more diſtinctly upon the organs of thinking, in as much as the father's brain has not allowed this vivifying fluid to be prepared in ſuch a manner, as to communicate ſufficient force to he ſon's.

§ 30. The cauſes which deſtroy the digeſtions, exhauſt the nerves, impoveriſh the blood, and diſturb all the evacuations, muſt inevitably bring on a loſs of ſtrength, and this is another effect of intenſe application. When H. Briggs publiſhed his tables of logarithms, it was his intention to go on with them; but the attention of his mind had ſo totally debilitated his body *, that he could never recover. "Although, "ſays M. de Fontenelle, M. de Varignon's "conſtitution ſeemed likely to reſiſt any labour "whatever, yet the aſſiduity and intenſeneſs of "his application brought a heavy diſeaſe up"on him; ſo that he was dangerouſly ill du"ring ſix months, and remained for three "years in a ſtate of conſumption, which was "evidently an exhauſting of the ſpirits †." Others fall into ſuch a general relaxation, that their fleſh becomes ſoft and flaccid, their pulſe feeble, their gums ſo looſe that the ſound teeth fall out of them without pain. If in this ſtate of weakneſs acute diſeaſes ſhould come on,

* *Saverien hiſt. des. progr. de les pr. humain, &c. p.* 460.

† *Dans ſon eloge, anur. t. 6. p.* 94.

they

they will be attended with ſo much the more danger; and a celebrated Engliſh phyſician has obſerved, that acute diſeaſes of the mildeſt nature to other perſons, were ſometimes fatal to men of letters *. Want of ſtrength makes the progreſs of a fever irregular, haſtens the putrefaction of the humours, confuſes the brain in the beginning of the diſeaſe, prevents the operation of medicines, diſturbs the regular formation of a criſis, and the patient, deprived of his natural powers, can no longer be aſſiſted by thoſe of art. I have lately ſeen a melancholy inſtance of this, in the caſe of our worthy rector whom we have lately loſt †; who, if the wiſhes of the public might have prevailed, would have lived to a very advanced age, but whoſe conſtitution was ruined by ſtudy. The firſt appearance of his diſeaſe was attended with ſuch an exceſſive debility, that even then I deſpaired of his recovery, and foreſaw the irreparable loſs which religion, virtue, the church, his country, his afflicted family, and the youth of this academy, have lately ſuſtained: what a man, gentlemen; what a collegue; what a friend has been taken from us! Like to the Roman of whom Pliny has given us a deſcription ‡, his life was pious: he was ſcrupulouſly nice in fulfilling all his duties, how extenſive ſoever they were: he was unchangeably benevolent and mild; reſpected, but not feared; for though an enemy to vice, he knew not how to hate the perſon who was guilty of it: he was deeply learned, very eloquent, and there was a great deal of matter in his diſ-

* Morton de variolis, cap. 6. oper. omnia, p. 381.

† M. J. Alph. Roſſet, profeſſor of divinity, and made rector a few months ſince.

‡ Euphrates, vid. Plinii Cæcilii, epiſt. lib. 1. epiſt. 9.

courſes:

courſes: his ſtyle was ſoft, fluent, diverſified, and marked with that ſublimity which ſubdues the heart, and engages the paſſions: during his life he was univerſally eſteemed, and is now moſt ſincerely and painfully regretted. But it is time to reſume my ſubject.

§ 31. Attention of the mind and inactivity of the body are the two principal, but not only cauſes of the diſorders incident to the learned: others are ſtill to be pointed out; and the firſt which offers itſelf to my conſideration, is the * attitude of a man at ſtudy; an attitude, which cannot but be prejudicial to health. The folds the veſſels are thrown into at the top of the thigh and in the bend of the knee, while a man is ſitting, interrupt the circulation in the lower extremities, which in proceſs of time muſt neceſſarily ſuffer from this circumſtance; the bending of the body conſtrains the abdominal viſcera, diſturbs their functions, and the digeſtive powers are diſordered from a new cauſe; the ſtomach being often compreſſed, is more particularly injured, and this irritation, together with what it ſuffers from the tenſion of the brain, and from want of motion, makes learned men more liable to the diſeaſe commonly called *the heart burn* †. The blood a-

* This conſiderable inconvenience of an unhealthy attitude may be palliated, or leſſened, by walking at intervals, while a ſtudious perſon thinks, which does not always retard thought: and by reading and writing, ſometimes, in a ſtanding poſture, at a deſk, which may be raiſed to different and commodious heights, by a ſcrew, round which it turns. This is much adopted at preſent by people of buſineſs who have much writing; their deſks are high, and their ſeats ſo, that they may almoſt be ſaid to ſtand. I know ſeverals, who, when reading, for the moſt part walk about their ſtudy.

† Aretæus, Cœlius Aurelianus, and Ætius, have before obſerved, that this was a diſorder common to the learned. See eſpecially a valuable diſſertation of M. Richter's De Cardialgia, Gottting. 1750.

ſcending

ſcending with difficulty through the veins of the lower belly, accumulates in the hæmorrhoidal veſſels, where its own weight carries it, and where it meets with the leaſt reſiſtance; for this reaſon the learned are ſo frequently tormented with the piles, a fatal diſeaſe; which has been for a long time conſidered as a uſeful evacuation, carefully to be kept up; but the dangers of which have been at length expoſed by ſome eminent phyſicians *, and I have alſo taken notice of them in another work †. They have ſometimes proved ſalutary, as all other hæmorrhages have; but are ſo very dangerous, that when any patient is likely to be afflicted with them, it behoves every prudent phyſician to endeavour to prevent them; in which attempt I have often been happily ſucceſsful.

§ 32. Night-watchings may be conſidered as a fourth cauſe of the diſeaſes incident to the learned; they are hurtful to them on ſeveral accounts.

1ſt. A man who has laboured all day, certainly works too hard, if his labours are continued through a part of the night.

2dly. The time allotted to ſleep is by this means too ſhort, and therefore not ſufficient to reſtore us.

3dly. Sleep, which comes after long attention of the mind, is never quiet and calm, it falls ſhort of the effect it ſhould produce, becauſe the fibres of the brain continue their oſcillations; we are not able to get rid of our thoughts, and therefore cannot reſt: and if ſleep ſhould ſteal upon us, it is rather a kind of ſlumber, during which our ideas fatigue us without be-

* Vid. Mr. de Haen's excellent diſſertation, Theſes pathologicæ de hæmorroidibus, Viennæ 1759.

† Epiſtol. Zimmermanno, p. 19, &c.

ing

ing uſeful, than an entire lulling of the ſenſes denoting a ſound ſleep. The antients, more prudent than we are, were better acquainted with this danger, and therefore judiciouſly divided the time between buſineſs and recreation; they ſeldom employed their evenings in ſerious * occupations: and Aſinius Pollio, that famous Roman conſul and orator, who firſt formed a library at Rome, was ſo well apprized of the dangerous conſequence of ſtudying at night, that he would not even read any letters after the tenth hour; that is, two hours before ſunſet †.

4thly. The laws of nature are ſubverted by nocturnal labours, for nature ſeems to have allotted the beginning of the night to reſt; ſhe ſeems to invite us to ſleep by the temperature of the air, which is then more damp, more cold, and leſs wholeſome, by the darkneſs and ſilence which prevails, and by the example of all living beings. Moſt animals feel a diminution of ſtrength at the ſetting of the ſun, and generally give way to ſleep till it riſes again, reſtoring ſalubrity to the air: ſeveral plants paſs into a ſtate which has been rightly called their ſleep. Shall the man of letters then divide the buſineſs of the night with villains and wild beaſts?

The dangerous effects of night air are ſo evident in ſome perſons, that M. Van Swieten

* This is alſo the prudent conduct of many modern and temperate writers, as they may be termed, whoſe works are probably the moſt correct and better digeſted, for not being too voluminous. The moderate exerciſe of ſuch in the afternoons, and the temperate relaxation of their evenings, muſt very generally conduce to their more ſound and refreſhing ſleep at nights; and thence render them the more alert and adapted to ſtudy in the ſucceeding mornings. *K.*

† Seneca de tranquillitat. anim. cap. 15.

knew a man troubled with the gout, who could not read even a letter after ſun-ſet without haſtening the fit. It is as dangerous to meditate in bed, as it is to go to bed too late. I have already obſerved, that meditation determines a greater quantity of blood to the brain, and in this caſe the circumſtance is facilitated by the horizontal poſition of the body; it is increaſed by ſleep coming on, and therefore this organ muſt unavoidably be injured by this bad cuſtom, as all the body ſuffers for want of ſleep, the conſequence of literary watchings. We grow weak and are ſeized with violent head-aches, the nerves are tired out, their motions become irregular, our ideas are confuſed, and we fall into a real delirium, which might perhaps be relieved by quiet and ſound ſleep, if in ſuch a ſtate we could expect to obtain it. Sleep, when diſturbed, is reſtored with more difficulty than any other of the animal functions: we loſe it with chearfulneſs, and regret the loſs of it, almoſt always in vain, with ſorrow. I have now a letter juſt received from a lady fifty years of age, who begins the account of her complaints in this manner: "I was born with a "good conſtitution; but in my earlieſt youth "have paſſed ſome part of the nights in read-"ing, I found myſelf at the age of eighteen "in a ſtate of dejection, which laid the foun-"dation of my diſorders: I was ſeized with "defluctions, &c. and was diſturbed with want "of ſleep, often troubleſome to me at this day, "and the effects of which I have ever felt."

5thly. The oily vapours ariſing from the candles we uſe to give us light, contribute ſtill to increaſe the danger of ſtudying at night, by corrupting the air, and making it equally pernicious to the eyes, the nerves, and the lungs:

if

if we burn wax the danger is not ſo great, although it ſtill ſubſiſts to a certain degree.

§ 33. The confined air men who live among their books, conſtantly breathe, is a fifth cauſe, not ſufficiently attended to, of the evils to which they are expoſed. A pure, open, country air is very refreſhing, facilitates breathing and perſpiration, gives ſtrength, and enlivens the whole machine. Every individual muſt have felt the truth of theſe aſſertions, and muſt therefore be ſenſible how very uſeful ſuch kind of air would be to men of letters; but inſtead of enjoying the benefit of it, they generally live in an atmoſphere, which being ſeldom renewed, is denſe, full of vapours, and inelaſtic; by this they are heated rather than refreſhed, become heavy inſtead of being animated, and are more relaxed than ſtrengthened: beſides that, this air, inſtead of promoting, obſtructs perſpiration, and thereby increaſes the bad effects proceeding from the other cauſes prejudicial to the learned. Not to renew the air of one's room, is to live in the impurities of the preceding day, and yet what hard ſtudent is there who thinks of letting freſh air into his chamber every day?

§ 34. This neglect, ſo frequent among the learned, with regard to the air they breathe, extends ſometimes to their perſons. I have ſeen ſome who attended ſo little to cleanlineſs, that the ſight of them was nauſeous, and who thereby expoſed themſelves to all the diſeaſes proceeding from ſlovenlineſs, which may be a ſixth cauſe more dangerous than it is commonly ſuppoſed to be *, and one of the moſt pernicious

* One of the greateſt phyſicians Germany ever produced has given us a very excellent diſſertation on this ſubject, J. Z. Platneri diſſertatio de morbis ex immunditiis, Lips. 1731, opuſc. t. 1. p. 70.

effects of which is the leſſening of perſpiration. Even the uncleanlineſs of the teeth, which is ſo common, is alſo troubleſome and dangerous. If they neglect cleaning them, a thick and fœtid tartar is collected about them, from whence proceeds a nauſeous ſmell extremely diſagreeable to thoſe who come near them, and which depraves their own ſaliva, ſpoils their gums, cauſes frequent defluxions, ſharp pains, inflammations, abſceſſes, ulcerations all over the mouth, and at laſt brings on the loſs of their teeth, by which their ſtomach is deprived of the aſſiſtance of maſtication, ſo neceſſary to every one, and more eſpecially to the learned, who are ſubject to bad digeſtion; and who are already very liable to ſuffer from the bad cuſtom ſome of them have of reading at meal-times, and of ſitting down to buſineſs immediately after.

§ 35. This ſeventh cauſe, from the inconveniences of which few who venture to expoſe themſelves to them, can be exempt, is one of thoſe which ſooneſt attacks the ſtomach. The influence of the nerves is ſo neceſſary to carry on digeſtion, that if we tie the nerves going to the ſtomach in an animal, the food putrifies without being digeſted *: ſo when the ſoul is ſo taken up that it ſuſpends the diſtribution of the animal ſpirits to the ſtomach at a time when they are moſt wanted, digeſtion muſt neceſſarily be imperfect; the food remains there a long time and is ill prepared, ſo that a great quantity of air is ſet looſe from it, which irritates this viſcus, ſwells it, and leaves it ſtill weaker after this enlargement. Xilander, in his excellent letter to Plempius upon the diſeaſes a magiſtrate is expoſed to from his profeſſion, has

* Halleri oper. minor. t. 1. p. 359.

been

been well appriſed of this, and expreſſed it in a manner ſuitable to the theory of the times, when he ſays, "that thoſe perſons who ſub-"tract continually from the heat of the ſto-"mach, to keep up the functions of the ſoul, "cannot digeſt their food *;" and Plempius in his work obſerves the danger of this bad cuſtom †; neither has it eſcaped the notice of any of the phyſicians, who have written upon any part of diet, more eſpecially ſuch as have choſen to treat of that kind of diet ſuitable to thoſe who cultivated the ſciences.

§ 36. This thirſt after knowledge, equally ridiculous and blameable, which will not ſpare the time neceſſary for eating and drinking, brings on another indiſcretion, attended alſo with bad conſequences, and which I reckon as the eighth cauſe of the diſeaſes incident to the learned; this is the bad habit of keeping in the urine a long time, and deferring going to ſtool. Theſe excrements, when too long retained, become putrid, irritate the inteſtines or the bladder, vitiate the mucus ſecreted in them, and make them become the ſeat of the moſt painful diſorders. The ſmall veſſels all the cavities of the body are filled with, and abſorb the putrid particles, which being conveyed into the maſs of blood, corrupt it; and what is perhaps ſtill more fatal, the nerves after a while ceaſe to do their offices when called upon: oftentimes even extreme tenſion makes them paralytic; then the bladder and inteſtines have no longer the power of expelling the urine and the fæces ‡, unleſs aſſiſted

*. We find this letter in 1662 at the beginning of Plempius's work De Togatorum Valetudine Tuenda.

†. P. 110

‡ Galen was well acquainted with this diſeaſe and its cauſes: and tells us that he has known many perſons who had loſt the

aſſiſted by art. At other times a diſorder appears, ſeemingly of an oppoſite nature, although it proceeds from the ſame cauſe, and varies from the former only as the palſy is fixed on a different part of the bladder; this is an incontinence of urine. I have been conſulted by ſeveral patients, who, from having kept in their urine too long, had loſt the power of retaining it, ſo that it flowed from them inceſſantly; and this is certainly one of the moſt diſagreeable inconveniencies, both to one's ſelf and others, it is poſſible to be afflicted with. This painful retention may be attended with more ſerious conſequences when continued too long; for every one knows the unhappy end of the immortal Tycho Brahé, who being in a coach with the emperor Rodolph the Second, from whom he received particular marks of favour, retained his urine too long, and forfeited his life by this reſpectful falſe ſhame.

§ 37. I ſhall not ſcruple to mention as the ninth cauſe of diſeaſes incident to the learned, the ſecluding themſelves from ſociety; a taſk many of them are willing to impoſe upon themſelves at firſt, and which they give way to afterwards from inclination, although attended with many real inconveniencies. Men were created for each other; their mutual aſſociation is productive of advantages not to be given up without ſuffering for it; and it has been very properly obſerved, that ſolitude brings on a conſumption *. Nothing can contribute more to

power of making water from having retained their urine too long, either through abſence when they were buſy, through neglect, or through decency when they were at church, in the ſenate, at the bar, or at meals. De Symptomat. Cauſis. lib. 3. cap. 8. & De Loc. Affect. lib. 6. cap. 4. Charter. t. 7. p. 98 & 515.

* Cicero de Officiis, l. 3. cap. 1.

health

health than chearfulneſs, which is animated by ſociety, and damped by retirement; and this moral cauſe of wearineſs, added to the phyſical cauſes abovementioned, often throws the learned into a melancholy, as fatal to their health as chearfulneſs would be beneficial to it: it brings on a miſanthropy, a fretful temper, a ſpirit of diſcontent, and a diſlike to every thing, which may be conſidered as the greateſt of evils, ſince they deprive us of the enjoyment of all that is good.

§ 38. Having pointed out the moſt general cauſes of the diſeaſes men of letters are expoſed to, I ſhall now take notice of thoſe which ariſe from the particular object of their attention, and of thoſe which are peculiar to certain organs. Anatomiſts have often violent * fevers, brought on by the infected air they breathe, and are ſubject to the diſorders which proceed from a corruption of the bile. The blood of dead bodies, in which their hands are conſtantly ſoaked, often makes the ſmalleſt † wound or the

* Fevers from this cauſe, I think, are generally of the putrid kind, and not remotely different from the jail or camp-fever. I knew a moſt eminent and aſſiduous anatomiſt, who was infected with one of them, from the cauſes Dr. Tiſſot mentions, and who did not recover his former health and his uſual plight, which was naturally thin and delicate, for ſeveral, I believe for near ſix months, from the invaſion of it. It was ſaid, I remember, that he underwent many evacuations, particularly bleedings, in the proceſs of this fever, which I confeſs I ſhould have judged neither correſpondent to the cauſe of his diſeaſe, nor to his own habit or conſtitution. The intention of theſe diſcharges was probably to obviate an inflammation: but the zeal and amity of his many phyſical friends ſeems to have rendered them very careful not to do too little for him. K.

† I have ſeen a ſtrong inſtance of this in an eminent ſurgeon, who having a ſlight ſcratch on the middle finger of his left-hand, contracted ſo very painful and dangerous an infection in it, from the diſſection of a morbid uterus, that a ſpeedy amputation

the ſlighteſt ſcratch fatal to them. Chymical experiments are alſo dangerous; ſeveral chymiſts have loſt their lives by them; and M. Boerhaave himſelf would have been ſuffocated by an acid vapour, if he had not been immediately relived by an alkaline ſpirit, which happening luckily to be near him, this vapour counter-acted the acrimony of the firſt, and quieted the ſpaſm it was beginning to produce in the lungs. Some botaniſts have periſhed while they were ſearching for and examining plants; but theſe accidents belonging more properly to the diſeaſes of artiſts, I ſhall go on to thoſe which are more immediately inflicted upon ſome of our organs by ſtudy.

§ 39. The eyes, of which I have already ſpoken, are among the organs moſt expoſed to injuries. The continual fatigue they undergo, irritates them; ſometimes the eye-lids and outward parts of the eye are inflamed; more frequently the nerves alone are attacked, without any perceptible external defect. I have ſeen ſeveral men in the prime of life, whoſe eyes were become ſo exceedingly irritable, that they could no longer bear the light, and were obliged to live and read in rooms ſo darkened, that I could ſcarcely diſtinguiſh letters of the largeſt ſtamp in them: candles eſpecially, which are very inconvenient on account of their ſmoke, and unſteady flame, they could not bear; neither could they ſuffer long the light of a ſlender

putation of it was judged neceſſary, to prevent its further ill conſequences, which were very acute and menacing. *K.*

The late Dr. *A.* Monro, when a ſtudent, met with a ſimilar accident, the effects of which, ſeemed ſo alarming, that the amputation of his arm was propoſed, but which he would not conſent to: it healed, though ſlowly; but he bore the marks till his death.

wax

wax taper. Others, when they have read a few pages, have their eyes full of tears, cannot ſee clear, and ſoon after cannot diſtinguiſh any thing. Diſorders of the ſight, produced by an exceſſive mobility of the nerves of the eyes, whether proceeding from too much reading or from any other cauſe, are very different and ſingular: I have collected many intereſting obſervations upon this ſubject, which will take place more properly in another work. I ſhall therefore conclude this article with obſerving, that men of letters often imagine they have ſparks before their eyes; of which complaint M. Zimmerman, who has once been ſubject to it, has treated very largely, and with great ſkill, in the work I have before quoted ſeveral times. This ſenſation takes place whenever the mobility of the optic nerves is arrived to ſuch a pitch, that although they are not affected by the external impreſſion of fire, yet, in conſequence of the diſordered ſtate in which they are, they experience the ſame lively ſenſations and motions as the preſence of that element would really create.

§ 40. Orators are alſo expoſed to fatal diſeaſes produced by their profeſſion. Reading loud ſometimes does the lungs good; I have even preſcribed it with ſucceſs in ſome diſturbances of the digeſtive powers; but a forcible and continued declamation, during which reſpiration is continually interrupted, is very hurtful to the lungs, irritates, heats, and inflames them. From hence ariſe hoarſeneſs, loſs of voice, heat in the breaſt, a cough, ſpittings of blood, ſuppurations, hectic fevers, a general debility, and at length a conſumption: thus theſe uſeful men diſappear, as a lamp which has only ſhone to give light to others. Cicero was threatened

threatened with theſe complaints; the phyſicians apprized him of it, and adviſed him to quit the bar for two years: he followed their advice; reſt ſoon ſtrengthened him, and reſtored him to that health which labour had impaired.

We have moſt reaſon to be concerned for preachers, who have no other duty in the church than that of repeating their ſermons; and counſellors, whoſe buſineſs conſiſts entirely in drawing up the proceedings of a law ſuit, and afterwards in pleading. Theſe men deſtroy their healths in two ways; firſt, by aſſiduous application, as other men of letters; and ſecondly, by declamation, which they muſt be the more affected with, inaſmuch as their lungs, accuſtomed to that languid circulation, the conſequence of a ſedentary life, are little able to ſupport ſuch powerful exertions.

§ 41. Great actors are liable to the ſame diſeaſes as orators are. The famous Moliere died of a ſpitting of blood, after having acted in one of his own comedies with a great deal of ſpirit; others have had the ſame fate, after a laborious part in a tragedy.

Muſicians eſpecially, often die of complaints in the breaſt; and after death we frequently find their lungs inflamed, ſuppurated, and ulcerated. M. Morgagni has ſeen a young man who was thrown into a phthiſis, by too frequently exerciſing a very fine voice: the ulceration of the lungs extended from the trachea to the larynx and throat; and he was ſuffocated in attempting to ſwallow the yolk of an egg *.

Curates and prieſts are much leſs liable to miſchiefs than preachers and pleaders at the

* De Sedibus & Cauſis Morborum, t. 1. p. 228.

bar,

bar, becauſe thoſe among them who chuſe to cultivate the ſciences, are prevented from carrying this paſſion to an exceſs, by the duties of their calling, which forces them to quit their ſtudies. Phyſicians have the ſame advantages; and the care they are obliged to take of the health of others, prevents them from deſtroying their own. In ſhort, happy are all ſuch learned men, who are called away from their books by the duties of their profeſſion; their body is exerciſed; and although their mind is oftentimes ſtill at work, yet this variety of labour is itſelf refreſhment.

§ 42. Declamation ſometimes brings on an accident which is the conſequence of the too great compreſſion the inteſtines are incommoded with during long inſpirations; theſe accidents are not unattended with danger, although they are not ſo alarming as diſorders of the breaſt; I mean herniæ or ruptures, which men who ſpeak in public are often ſubject to. They may indeed be kept up by bandage, which is indiſpenſably neceſſary whenever they have made their appearance; and without which the perſons afflicted with them would be expoſed to the moſt fatal conſequences, whenever they attempted to ſpeak with energy.

§ 43. Theſe are the principal diſeaſes brought on by too intenſe an application to ſtudy; but we muſt not ſuppoſe that all perſons who give themſelves up to theſe exceſſes ſuffer exactly in the ſame manner, or in the ſame degree: the variety of conſtitutions and ages, and the different concurrence of foreign circumſtances, produces conſiderable alterations in the effects, which it may not be improper to take ſome notice of.

§ 44. Few men are ſo perfectly formed, that the

the forces of their reſpective organs ſhould be in exact proportion to each other; ſome part or other is generally weaker than the reſt: the weak part commonly ſuffers firſt, and receives the moſt violent ſhock from immoderate application, as well as from all other exceſſes.

If the ſtomach is bad, either naturally or from errors in diet, this organ will be affected by the exerciſe of the mind, while the nerves ſhall remain in a ſound ſtate; on the contrary, if the nervous ſyſtem is weak, and the ſtomach ſtrong, nervous diſeaſes of great importance will be brought on before the ſtomach is injured.

If the muſcular fibres are too much relaxed, laſſitudes, numbneſs, extreme weakneſs, and ſwellings, will come on before either the nerves or the ſtomach are attacked.

Perſons who have weak lungs will be ſeized with the diſorders of the breaſt before-mentioned, and be conſumed by a phthiſis and hectic fever, without having experienced any complaints in the other viſcera.

If the veſſels of the head are weak, continual head-achs and frequent bleedings of the noſe come on, to which young people who are hard ſtudents are very ſubject, becauſe application, as I have before obſerved, forces the blood up into the head.

Even the ſtrength of the conſtitution is itſelf dangerous. Young people of excellent conſtitutions apply themſelves to ſtudy with indefatigable induſtry; the powerful action of the ſoul increaſes that of the other organs, and they are attacked with inflammatory diſeaſes, the conſequence of irritation long kept up in vigorous habits. Sometimes they expire in the firſt attack; more commonly they get the better of that;

that; and if they find themſelves perfectly reſtored, their conſtitution recovering its vigour, they give themſelves up again to the ſame labours, and relapſe into the ſame diſorders. There are frequent inſtances of robuſt young men cloſe applying to ſtudy, who are attacked with inflammatory fevers every year: at laſt, in proceſs of time, being worn out by theſe attacks and by their labours, they loſe their ſtrength, and are ſeized with conſumptive diſeaſes, againſt which they are no longer able to reſiſt.

§ 45. Study alſo produces various effects, according to the different times of life in which we apply to it, and is particularly fatal to infancy. I have known very ſenſible children ſeized with this literary kind of phrenzy, unſuitable to their age, and have foreſeen with concern the fate which attended them: at firſt they are prodigies, and in the end become idiots. Exerciſe, which ſtrengthens the body, is ſuited to this age rather than ſtudy, which weakens it, and ſtops its growth. Nature cannot ſucceſsfully lead on two ſuch ſwift progreſſions together. There are examples of children who have grown up wonderfully faſt; and the laſt Memoirs of the Royal Academy of Sciences ſpeak of a child of the province of Languedoc, who at ſix years old had attained to the height of a tall man. But in theſe remarkable caſes the mind remains ever in a ſtate of childhood; and even the premature forces of the body, which have acquired no ſolidity, decay with as much rapidity as they had before advanced; ſo that theſe prodigies die at twelve or thirteen years of age. When the progreſs of the underſtanding is too quick, that the genius manifeſts itſelf very early, and a degree of applica-

tion ſuitable to this progreſs is allowed, the growth of the body is impeded, becauſe it is unaſſiſted by the nervous influence, the ſtrength is exhauſted, and an early death ſucceeds, after the body has ſuffered many painful diſeaſes. M. Phil. Barratier is a well known inſtance of this kind: "At eight years old he underſtood "Hebrew, Greek, Latin, and French, per- "fectly well, beſides German, which was his "native tongue; at ſeventeen years of age he "was the moſt learned man in Europe; but "from his earlieſt infancy he had ever been "ſubject to defluxions, and other ſlight indiſ- "poſitions. At eighteen he was ſeized with a "cough, and in the courſe of the ſame year, "with an infinite number of other diſeaſes; he "loſt his appetite and his ſleep, and at length "wiſhed for nothing ſo much as to be releaſed "from all his ſufferings, which happened to "him at the age of nineteen years and a few "months." "I have ſeen (ſays M. Boerhaave, "a young man whoſe knowledge was univer- "ſal; he was a prodigy of erudition, but did "not live to the age of five and twenty years; "and another, extremely learned alſo, who "ſtudied day and night, and who died in a "decay at the age of nineteen, without any "certain ſymptoms of any diſeaſe *." We have alſo ſeen one of our fellow citizens, a man born with uncommon abilities, whoſe active and penetrating mind gave itſelf up entirely to reflection and ſtudy, at a time when he ſhould have been acquiring ſtrength; by theſe means he was reduced, during ſeveral years, to the moſt dangerous and miſerable ſtate of languor: an uncommonly ſevere diet, and an interrup-

* Prælect ad Inſtitut. § 1056. t. 7. p. 346.

tion

tion of his ſtudies began to reſtore him to health; he then unfortunately forgot that his conſtitution was delicate, and periſhed in the prime of life, a victim to the labours of his mind †.

In my Advice to the People I have pointed out the injuries the children of our peaſants are expoſed to from being oppreſſed with labour beyond their ſtrength; and it may be collected from what has been already mentioned here, although much more might be ſaid upon the ſubject, that much greater miſchiefs ariſe from children being over-burdened with literary employments. Severe parents or maſters who require ſuch kind of application, treat their children as gardeners, who want to ſell the forward fruits, treat their plants; they ſacrifice ſome, to force others to produce flowers or fruits which never laſt long, and are in every reſpect inferior to thoſe which are ſuffered to come to maturity at the proper ſeaſon: but the end is anſwered; the gardener's ſkill in preparing his hot-beds and taking care of his green-houſe is extolled, and people are aſtoniſhed at the produce of his garden. There is not perhaps a more cruel and uſeleſs reſtraint than that which obliges children to ſtudy hard, and requires them to make much progreſs in learning; it is the ready way to deſtroy their health as well as their talents; and notwithſtanding all the powerful arguments urged by great men againſt this cuſtom, it is ſtill too prevalent amongſt us ‡.

The

† M. Philippe Loys de Chezeaux.

‡ I always think with pleaſure on the laſt will of Anaxagoras, that famous philoſopher, who firſt taught that this world was created by an intelligent Being. When perſecuted

The evils children are expoſed to from too much application, are ſtill aggravated when that application is directed to ſtudies they have an averſion to; for even at any age, when we are obliged to fix our thoughts upon any diſpleaſing ſubject, the miſchief which wearineſs adds to thoſe produced by too much attention ſoon deſtroy the patient, who can only be relieved by applying to another ſubject. "I have "ſeen, ſays M. Boerhaave, perſons who had "been confined to ſtudies which were diſagree-"able to them, brought as it were to life a-"gain from applying themſelves * to others "more ſuitable to their inclinations †.

at Athens under pretence of irreligion, he retired to Lampſacus, where he was treated with all the reſpect he deſerved, which was even carried ſo far that an altar was raiſed to him. "The principal people of the city called upon him a few days "before his death, and aſked him whether he had any orders "to give: he anſwered that he deſired nothing more than that "children might be allowed to divert themſelves every year "during the month wherein he died. This was accordingly "executed; and the cuſtom prevailed ſtill in the time of Dio-"genes Laertius." *T.*

* A recourſe to ſuch muſical airs as are moſt agreeable to the ear of a perſon fatigued with long and intenſe ſtudy, might prove recreating and uſeful, by exciting the action of different nerves, from thoſe which have been over-exerciſed by long thought and attention, and which muſt have need of reſt. I am acquainted with a ſedentary perſon, greatly addicted to reading, who aſſures me, that when he has found himſelf nearly ſtupified by attending to one book or ſubject, he has found his apprehenſion ſufficiently awake on recurring directly to a different one. Another gentleman of conſiderable application to various reading alſo informs me, that when he has read himſelf into a head-ach and a ſenſible obtuſeneſs of diſtinguiſhing, an immediate diverſion to elegant poetical works, or even to writing a little poetry, for which he is thought to have ſome talent, has entirely removed his head-ach, and proved as ſenſibly cordial to him, as he ſuppoſes muſic would have been to a perſon of a better muſical ear than his own. Theſe obſervations naturally remind me of that circumſtance in the Pagan mythology, which aſcribes the powers of medicine, of poetry, and of muſic, to the ſame heathen deity, Apollo. *K.*

† Prælect. ad Inſtitut. § 1056. t. 7. p. 346.

§ 46.

§ 46. If too early an application to ſtudy is hurtful, it is no leſs dangerous to begin to apply too late in life. Cuſtoms are formed only by degrees; there is a time of life when they are not contracted without difficulty. When a man is arrived to his full ſtrength, without having been accuſtomed to literary occupations, it is to be feared that the fibres of the brain will not readily yield to the recent impreſſions this new kind of life will imprint; ſo that the motions of the nerves will probably be irregular, and a delirium will enſue. Inſtances of perſons loſing their ſenſes, from giving themſelves up to books at a time when they ought rather to think of leſſening their attention to ſtudy, are not unfrequent. I have had here, not long ſince, a foreigner who left off trade at forty years of age, in order to cultivate the ſciences, and who diſordered his brain with reading Locke, Newton, Clarke, &c. He got entirely well by abſtaining from reading, by diverſions, agreeable converſations, exerciſe, and medicines, but did not long continue ſo; for having reſumed his metaphyſical enquiries, he loſt his reaſon again. Since that time I have been called in to another patient, who being deſirous of becoming a geometrician and natural philoſopher at fifty years of age, was ſeized with a melancholy, which is real madneſs when at its height.

§ 47. A ſudden increaſe of buſineſs is alſo fatal. The only obſervation I have found in all M. Pujati's great work, is to this purpoſe: it is of a celebrated preacher, who being ſent by the head of his order to preach in a city where the audience was not eaſily ſatisfied, exerted himſelf ſo ſtrenuouſly, that he brought on an incurable epilepſy.

§ 48. It is even dangerous for men of letters, who are not young, to apply themſelves ſuddenly to ſciences different from thoſe they had been before exerciſed in. The new ideas they acquire muſt certainly put ſome new fibres of the brain in motion, which is therefore thrown into ſuch an agitation that the nervous ſyſtem is weakened. I knew a very learned divine, who deſtroyed his health entirely, by interrupting his uſual ſtudies in order to apply himſelf to Hebrew; and a reſpectable clergyman, who being promoted to a profeſſorſhip of divinity at fifty years of age, fell into a conſumption, which deprived him of life, and was cauſed by his laborious endeavours to fulfil the duties of his new calling.

§ 49. If changing the object of ſtudy is prejudicial to perſons in the middle time of life, the continuation of the labours of the mind is no leſs hurtful to ſuch as are in an advanced age. Few men are born with ſuch a happy conſtitution as Gorgias of Leontium; who lived to the age of one hundred and eight years without diſcontinuing his ſtudies, and without any infirmity; or ſuch as his diſciple Iſocrates had, who wrote his Pan-Athenæai at the age of ninety four, and who lived to that of ninety-eight years; or ſuch a conſtitution as that of one of the greateſt phyſicians in Europe, who although he has ſtudied very hard all his life-time, and now that he is almoſt ſeventy, wrote me word not long ſince, that he ſtill ſtudied generally fourteen hours every day, and yet enjoyed the moſt perfect health. Theſe inſtances, and ſome few more of the ſame nature, cannot be admitted as certain rules: it is ſtill true, that old age ſuffers, and is ſooner brought down to the grave by aſſiduous application. Our ſoul

is

is certainly immortal; but while its union with the body ſubſiſts, it follows the ſame career, ſeems to be born, to advance, and to grow old with it *. The diminution of bodily ſtrength warns us to leſſen the labours of the mind; the one cannot bear the ſame burdens, nor the other ſupport the ſame ſtudies, and the faculties decreaſe with the muſcular powers. Few old men are ſenſible of this truth; none can bear to be told of it; they are all like the archbiſhop of Grenada upon this article †, but it is not the leſs certain: ſo that if thoſe perſons who know how to moderate their application as their age advances, prevent infirmities and inſure their health, thoſe who are prudent enough to know the time when they ought to lock up their productions, certainly inſure their reputation.

"Solve ſeneſcentem mature ſanus equum, ne
"Peccet ad extremum ridendus & ilia du-
"cat." HORAT.

"I have ſeen," ſays the magiſtrate of Bruſſels before-quoted, "the ſtrongeſt men periſh when "they juſt begin to grow old, by continuing "to ſtudy as much as they had done in the "time of their greateſt vigour. We ought to "profit by their example. Our time of life is "calculated for eaſe and proper leiſure; it is "the time for relaxation; let us curtail our la-"bours by degrees, and at laſt give them en-"tirely up. After having dedicated the great-"eſt part of our lives to the public, let us re-"ſerve the latter part for ourſelves: this con-"duct is pointed out to us by thoſe ſtatutes,

* Gigni pariter cum corpore, & una creſcere ſentimus pariterque ſeneſcere mentem. *T.*

† Vid. Gil Blas. t. 3.

"which

" which at ſixty-five years of age freed a ſena-
" tor from his functions, and reſtored him to
" himſelf *."

§ 51. The diſeaſes I have here given a ſketch of, do not ariſe from ſtudy alone; immoderate application of the mind, of whatever kind, will produce the ſame; ſome examples of which have already been given.

Health is frequently deſtroyed by exceſſive devotion: M. Zimmerman has collected ſeveral intereſting obſervations on this head, in which devout melancholy is well delineated: its ſymptoms are very unaccountable, alarming, and grievous; and there are few practitioners who have not had opportunities of ſeeing ſome ſhocking inſtances of this diſeaſe. The greatneſs and excellence of the object, and the ſatisfaction the ſoul experiences in giving itſelf up to the contemplation of the Almighty, excites too lively a ſenſation, and produces in the brain a tenſion too violent and too continual, to be ſupported for a long time together without injury; it ſoon throws the ſoul into fanatical madneſs, and exhauſts the body. I have ſeen the moſt amiable young perſons, led away by an erroneous ſyſtem, fade and fall into decay, neglecting the duties of their calling, in order to give their thoughts up wholly to the Supreme Author of their being, who could not have been more properly glorified than by a ſtrict attention to thoſe duties. You ſtill regret one of your ſtudents, Gentlemen, a man of the greateſt abilities, born with ſtrong powers of the mind, whoſe candour and other virtues would have been an acquiſition to the church; but who unfortunately devoted himſelf to a ſect, of

* Epiſtol. Plempio.

which

which he ſoon was the victim, the powers of his body decaying as faſt as his mind became more zealouſly inflamed.

§ 51. The employments of majeſty, of adminiſtration, of judicature, deep ſpeculations of all kinds, and in ſhort every thing which exerciſes the faculties of the ſoul too powerfully and for too long a time, will produce the ſame diſorders as the cultivation of the moſt abſtruſe ſciences. Kings, ſenators, miniſters, embaſſadors, projectors, will ſuffer in the ſame manner as men of letters do, if they dedicate as much time, and apply as intenſely to their affairs as the learned do to their ſtudies, They have indeed this advantage, the importance of which I have before indicated, that even the duties of their office often divert their attention, and oblige them to uſe exerciſe, an advantage the mere ſtudent is deprived of: but again, their labours are often attended with uneaſineſs and vexation of mind, the conſequences of which are ſtill more grievous than thoſe of inaction, and are equally oppreſſive to the ſoul and body; ſo that I am much amazed when I ſee perſons bear up amidſt the buſineſs of great undertakings, and the ſolicitude inſeparable from them. Cæſar, Mahomet, Cromwell, and Paoli, greater perhaps than either, muſt certainly have been ſupplied with powers more than human; notwithſtanding which, they would ſtill have ſunk, if not ſupported by the aſſiſtances of temperance and exerciſe. But I have ſufficiently treated of the diſeaſes, and ſhall now conſider the moſt proper methods of relieving them.

§ 52. The firſt difficulty to be overcome in reſtoring the health of men of letters, is to convince them they are in the wrong. They

" which at ſixty-five years of age freed a ſena-
" tor from his functions, and reſtored him to
" himſelf *."

§ 51. The diſeaſes I have here given a ſketch of, do not ariſe from ſtudy alone; immoderate application of the mind, of whatever kind, will produce the ſame; ſome examples of which have already been given.

Health is frequently deſtroyed by exceſſive devotion: M. Zimmerman has collected ſeveral intereſting obſervations on this head, in which devout melancholy is well delineated: its ſymptoms are very unaccountable, alarming, and grievous; and there are few practitioners who have not had opportunities of ſeeing ſome ſhocking inſtances of this diſeaſe. The greatneſs and excellence of the object, and the ſatisfaction the ſoul experiences in giving itſelf up to the contemplation of the Almighty, excites too lively a ſenſation, and produces in the brain a tenſion too violent and too continual, to be ſupported for a long time together without injury; it ſoon throws the ſoul into fanatical madneſs, and exhauſts the body. I have ſeen the moſt amiable young perſons, led away by an erroneous ſyſtem, fade and fall into decay, neglecting the duties of their calling, in order to give their thoughts up wholly to the Supreme Author of their being who could not have been more properly glorified than by a ſtrict attention to thoſe duties. You ſtill regret one of your ſtudents, Gentlemen, a man of the greateſt abilities, born with ſtrong powers of the mind, whoſe candour and other virtues would have been an acquiſition to the church; but who unfortunately devoted himſelf to a ſect, of

* Epiſtol. Plempio.

which

which he ſoon was the victim, the powers of his body decaying as faſt as his mind became more zealouſly inflamed.

§ 51. The employments of majeſty, of adminiſtration, of judicature, deep ſpeculations of all kinds, and in ſhort every thing which exerciſes the faculties of the ſoul too powerfully and for too long a time, will produce the ſame diſorders as the cultivation of the moſt abſtruſe ſciences. Kings, ſenators, miniſters, embaſſadors, projectors, will ſuffer in the ſame manner as men of letters do, if they dedicate as much time, and apply as intenſely to their affairs as the learned do to their ſtudies, They have indeed this advantage, the importance of which I have before indicated, that even the duties of their office often divert their attention, and oblige them to uſe exerciſe, an advantage the mere ſtudent is deprived of: but again, their labours are often attended with uneaſineſs and vexation of mind, the conſequences of which are ſtill more grievous than thoſe of inaction, and are equally oppreſſive to the ſoul and body; ſo that I am much amazed when I ſee perſons bear up amidſt the buſineſs of great undertakings, and the ſolicitude inſeparable from them. Cæſar, Mahomet, Cromwell, and Paoli, greater perhaps than either, muſt certainly have been ſupplied with powers more than human; notwithſtanding which, they would ſtill have ſunk, if not ſupported by the aſſiſtances of temperance and exerciſe. But I have ſufficiently treated of the diſeaſes, and ſhall now conſider the moſt proper methods of relieving them.

§ 52. The firſt difficulty to be overcome in reſtoring the health of men of letters, is to convince them they are in the wrong. They

are

are like lovers, who grow angry whenever any fault is found with the object of their affection; beſides, the learned have generally a kind of ſteadineſs in their ideas, contracted by ſtudy and increaſed by ſelf-opinion, too often the effect of knowledge, which prevents them from being eaſily perſuaded of the hurtful tendency of their conduct. Warnings, arguments, intreaties, chidings, are often uſed in vain; they find out a thouſand ways of deceiving themſelves; one depends upon the ſtrength of his conſtitution; another pleads the force of cuſtom; a third flatters himſelf he ſhall ſtill eſcape, becauſe he has never yet ſuffered; a fourth encourages himſelf with examples which prove nothing in his favour; all of them reſiſt the phyſician's advice with an obſtinacy miſtaken by them for reſolution, which they think commendable, and therefore become the victims of it. Far from being ſenſible of approaching danger, they ſometimes cannot be perſuaded that they are ill; or rather, they think a ceſſation from ſtudy is the greateſt injury they can ſuffer, and reckon others for nothing, provided they can ſcreen themſelves from that. When the oppoſite extreme prevails, and that they are attacked with ſuch mobility of the nerves as makes them fear even the moſt imaginary evils, they are not leſs difficult to be dealt with. Want of courage does not always make them tractable; on the contrary, an irreſolution worſe than obſtinacy takes place; ſo that it can hardly be expected they will ſubmit to the confinement of a regular treatment. It may indeed be affirmed in general, that learned men are the moſt ungovernable patients; which is an additional reaſon for giving them

an

an inſight into the means of preſerving and reſtoring their health.

§ 53. The relaxation of the mind is the firſt preſervative; without this, all other helps are inefficacious. I know there has been a ſmall number of men of ſuperior talents, to whom it would have been preſumption to have given this advice: it would have been a kind of ſin to have taken them away from their ſtudies. Deſcartes, abſorbed in the moſt ſublime meditations, and marking out to mankind the path of truth; Newton, diſcovering and laying open the laws of nature; Monteſquieu, compoſing a code for all nations and all ages, are certainly to be reſpected in their occupations: they were born for arduous undertakings, and the public requires great things of them. But how few are there whoſe labours are of ſo much conſequence to mankind? The greater part of the learned waſte their time and their health in very unprofitable ſtudies. One is a compiler of the moſt common things; another ſays what has been often ſaid before; a third is employed in uſeleſs diſquiſitions; a fourth deſtroys himſelf by giving up his time to compoſitions of a light and trifling nature; a fifth, in tedious and prolix writings: neither do any of them think of the hurt they do themſelves, and the little advantage the public will reap from it. The greater number indeed never concern themſelves about the public, but rather devour ſtudy as gluttons cram down food, merely to glut their appetities; by which they alſo neglect many eſſential duties. The only way, therefore, is to be reſolute with them, to force them away from their cloſets, and oblige them to indulge in recreation and reſt, which will remove their diſorders and reſtore their health. Beſides,

ſides, the time they paſs out of their cloſets is not thrown away; they return to their labours with freſh eagerneſs; and a few moments given up every day to leiſure, will be amply repaid by the enjoyment of health, which will prolong the courſe of their ſtudies. Sometimes even the moſt lucky thoughts ariſe in the midſt of recreation *. One of the greateſt geniuſes of our age compoſed his immortal works walking about in the country †. The ſoul unfolds itſelf in open air, but is impriſoned within the confined walls of a ſtudy; it is elevated by the fragrance of rural flowers, depreſſed by the ſmell of a lamp. Plutarch's compariſon on this ſubject is very juſt and excellent: "A little water, ſays he, nouriſhes and ſtrengthens "plants; a greater quantity ſtifles them." Thus it is with the mind; moderate labour is its food; exceſſive labour deſtroys it ‡. It is, perhaps, more neceſſary to prevent this diſeaſe than any other: diſorders ſeated in the brain ſcarce admit of a radical cure; it recovers its powers with more difficulty than other organs. The more uſeful the brain is to men of letters, the more ought they to take care of it; and I ſhould think the inſtances we have of perſons becoming idiots from too intenſe application, ſufficient to open the eyes of the learned, and teach them moderation. Let them therefore no longer perſiſt in attempting to juſtify ſuch dangerous practices, and in ſporting with their own health; let them not alledge the examples of others, the trial is too hazardous; let them

* Vegeta & ſtrenua ingenia, quo plus receſſus ſumunt hoc meliores impetus edunt. Valer. Maxim. lib. 3. cap. 6. p. 140.

† Animus eorum, qui in aperto ære ambulant, attollitur. Plin. jun.

‡ De Education. Pueror. cap. 12.

not

not avail themſelves of the ſtrength of their conſtitution, ſince they are every day impairing it; let them not depend upon the effects of cuſtom, ſince that only makes the action of the noxious cauſes imperceptible, without deſtroying it; let not the happy circumſtance of having hitherto eſcaped, make them careleſs of the impending danger; and laſtly, let them be convinced, that we cannot with impunity give ourſelves up to exceſſive application; and that in order to cultivate the ſciences without prejudice to our health, it is neceſſary to interrupt the courſe of our ſtudies frequently.

§ 54. When inactivity was mentioned as the ſecond cauſe of the diſorders here treated of, exerciſe was certainly repreſented at the ſame time, as one of the moſt powerful preſervatives and reſtorers of the health of the learned. In the foregoing article the advantages of open air have been conſidered: theſe are greatly enhanced, if accompanied with ſome degree of motion. From the combination of theſe two ſalutary powers, we receive refreſhment, circulation is carried on with eaſe, perſpiration encouraged, the action of the nerves reanimated, and the limbs are ſtrengthened. Every man who has been confined to his ſtudy for ſome days, feels his head heavy, his eyes inflamed, his lips and mouth dry; he complains of a certain uneaſineſs about his breaſt, a ſlight tenſion at the pit of his ſtomach, is more diſpoſed to melancholy than mirth, his ſleep is leſs refreſhing, and his limbs are weighty and benumbed. If he ſtill perſiſts in ſhutting himſelf up, all the ſymptoms increaſe, and lay the foundation of the miſchiefs I have deſcribed. A walk for two or three hours in the country diſpels them entirely, and brings back ſerenity, freſhneſs,

and ſtrength. The learned in general are not ſufficiently convinced of the influence the body has on the ſoul, although it was well known to our greateſt men *, who have been ſenſible that the mind was ſubject to the powers of phyſic as well as the body. "The ſoul, ſays Deſcartes, "is ſo much influenced by the conſtitution and "the ſtate of the bodily organs, that if it were "poſſible to find out a method of increaſing "our penetration, it ſhould certainly be ſought "for in medicine †." This conjecture of Deſcartes has been verified by M. Hoffman. This famous practitioner expreſsly declares, that he has known ſome ſtupid perſons acquire judgment from being put a little into motion ‡. All men of letters ought firmly to reſolve to give up at leaſt two hours every day to exerciſe; and Mr. Boerhaave is of opinion it ſhould be taken before dinner. Walking alone is very beneficial, but not quite ſufficient; and it cannot be too much recommended to them to ride out frequently on horſeback: this kind of exercıſe is of great uſe to the head, the breaſt, and the viſcera of the lower belly eſpecially by preventing or diſpelling their obſtructions, which have been mentioned among the diſeaſes common to ſedentary perſons. I ſhould even wiſh that the preſent age and poſterity might be indebted to our learned for the reſtoration

* There is a very remarkable paſſage on this ſubject in Moſes Maimonides, the moſt antient of the Arabian phyſicians: "Since health, ſays he, aſſiſts us much in the knowledge and "worſhipping of the Divinity, and that the ſick man cannot "properly contemplate his works, it becomes therefore abſo-"lutely neceſſary to avoid with care whatever may be hurtful "to the body, and on the contrary to ſeek after every thing "which may preſerve or improve health." *T.*

† De methodo, n°. 6.

‡ De motu optim. corpor. medicin. § 9.

of

of thoſe various exerciſes which the ancients made a part of their duty, which our anceſtors were ſtill expert in, and which have been ſo much neglected for the two or three laſt generations, that in all probability in a few years hence their very names will not be found but in dictionaries. Hiſtory, which men of letters are certainly well acquainted with, abounds with inſtances of the good effects of exerciſe. Herodicus, a famous phyſician, the maſter of Hippocrates, who firſt introduced the medicina gymnaſtica, reſtored his own health by this means, and lived to the age of one hundred years, notwithſtanding the weakneſs of his conſtitution: he might perhaps be too free in preſcribing it to his patients, but we are all apt to be too zealous in favour of uſeful diſcoveries, becauſe we know not at firſt how to determine their benefits and diſadvantages *. Strabo being ſeized with a diſorder of the ſpleen, one of thoſe incident to the learned, cured himſelf only by exerciſe †. In the ſame manner Hiſmonæus got the better of a weakneſs of the nerves. Galen, who was ſickly 'till he was more than thirty years old, tells us himſelf, that he could not recover his health any other way than by giving up ſome hours every day to exerciſe. Socrates ‡ and Ageſilaus riding acroſs a ſtick with their children; the great pontiff Scævola, Scipio, and Lælius playing at chuck, and making ducks and drakes by the ſea-ſide

* Herodicus was brother to the famous rhetorician Gorgias of Leontium, who lived to the age of one hundred and ſeven years, and certainly followed the advice of his brother. *T.*

† There are ſome princes and many great men of this name. This one is Strabo of Lampſacus, ſurnamed the Natural Philoſopher. *T.*

‡ Arundine equitavit ipſe Socrates. Valer. Maxim. l. 8. c. 8.

and ſtrength. The learned in general are not ſufficiently convinced of the influence the body has on the ſoul, although it was well known to our greateſt men *, who have been ſenſible that the mind was ſubject to the powers of phyſic as well as the body. "The ſoul, ſays Deſcartes, "is ſo much influenced by the conſtitution and "the ſtate of the bodily organs, that if it were "poſſible to find out a method of increaſing "our penetration, it ſhould certainly be ſought "for in medicine †." This conjecture of Deſcartes has been verified by M. Hoffman. This famous practitioner expreſsly declares, that he has known ſome ſtupid perſons acquire judgment from being put a little into motion ‡. All men of letters ought firmly to reſolve to give up at leaſt two hours every day to exerciſe; and Mr Boerhaave is of opinion it ſhould be taken before dinner. Walking alone is very beneficial, but not quite ſufficient; and it cannot be too much recommended to them to ride out frequently on horſeback: this kind of exereiſe is of great uſe to the head, the breaſt, and the viſcera of the lower belly eſpecially by preventing or diſpelling their obſtructions, which have been mentioned among the diſeaſes common to ſedentary perſons. I ſhould even wiſh that the preſent age and poſterity might be indebted to our learned for the reſtoration

* There is a very remarkable paſſage on this ſubject in Moſes Maimonides, the moſt antient of the Arabian phyſicians: "Since health, ſays he, aſſiſts us much in the knowledge and "worſhipping of the Divinity, and that the ſick man cannot "properly contemplate his works, it becomes therefore abſo-"lutely neceſſary to avoid with care whatever may be hurtful "to the body, and on the contrary to ſeek after every thing "which may preſerve or improve health." *T.*

† De methodo, n°. 6.

‡ De motu optim. corpor. medicin. § 9.

of

of thoſe various exerciſes which the ancients made a part of their duty, which our anceſtors were ſtill expert in, and which have been ſo much neglected for the two or three laſt generations, that in all probability in a few years hence their very names will not be found but in dictionaries. Hiſtory, which men of letters are certainly well acquainted with, abounds with inſtances of the good effects of exercise. Herodicus, a famous phyſician, the maſter of Hippocrates, who firſt introduced the medicina gymnaſtica, reſtored his own health by this means, and lived to the age of one hundred years, notwithſtanding the weakneſs of his conſtitution: he might perhaps be too free in preſcribing it to his patients, but we are all apt to be too zealous in favour of uſeful diſcoveries, becauſe we know not at firſt how to determine their benefits and diſadvantages *. Strabo being ſeized with a diſorder of the ſpleen, one of thoſe incident to the learned, cured himſelf only by exercise †. In the ſame manner Hiſmonæus got the better of a weakneſs of the nerves. Galen, who was ſickly 'till he was more than thirty years old, tells us himſelf, that he could not recover his health any other way than by giving up ſome hours every day to exerciſe. Socrates ‡ and Ageſilaus riding acroſs a ſtick with their children; the great pontiff Scævola, Scipio, and Lælius playing at chuck, and making ducks and drakes by the ſea-ſide

* Herodicus was brother to the famous rhetorician Gorgias of Leontium, who lived to the age of one hundred and ſeven years, and certainly followed the advice of his brother. *T.*

† There are ſome princes and many great men of this name. This one is Strabo of Lampſacus, ſurnamed the Natural Philoſopher. *T.*

‡ Arundine equitavit ipſe Socrates. Valer. Maxim. l. 8. c. 8.

to reſt them from their labours, and to preſerve their health, ſpirits, and ſtrength; appear to me as examples worthy to be propoſed, without offence, to the moſt learned amongſt us, for their imitation; and it is probable they will not diſdain to follow them. "It is ſurpriſing, ſays "Pliny the younger, that the powers of the "mind ſhould be ſo much quickened by mo-"tion and bodily exerciſe."

Sailing is an exerciſe which cannot be recommended to the learned, becauſe it is not within the reach of the greateſt part of them; but it may be conſidered as a powerful remedy for removing obſtructions in the viſcera, diſſipating the bile, reſtoring perſpiration, encouraging all the evacuations, and which therefore ſhould not be neglected by thoſe who have an opportunity of uſing it. Its advantages were well known to the ancients *, and it is the kind of carriage preferred to all others by Octavius Auguſtus, who was himſelf a man of letters, and ſubject to their infirmities †. "He applied "himſelf early, ſays his hiſtorian, and with "eagerneſs, to eloquence and the fine arts: "he was afflicted with heavy diſorders, was "ſubject to rheums and defluxions, and was "troubled with the ſtone and inflammations "of his bowels ‡." But although he ſuffered the inconveniencies which knowledge brings along with it, yet he was more prudent than the learned generally are; for he knew how to attend properly to his health, and thereby preſerved himſelf to a good old age.

* M. Gilchriſt, a celebrated Scotch phyſician, has ſhewn the good effects of navigation, in many grievous diſorders, by a collection of obſervations in a ſmall work, On Sea Voyages. T.

† Si quo mari pervenire poſſet potius navigabat. Sueton.

‡ In vit. Oct. Aug. cap. 82.

Riding

Riding in a coach well hung, and on an even road, can hardly be called exerciſe, any more than the motion given to ſick people, in different machines contrived for that purpoſe, when they are not in a condition to go out. But theſe are feeble reſources we never have recourſe to while more effectual helps can be had; and men of letters have it always in their power to uſe better exerciſe, if they do not begin too late.

The exerciſes moſt ſuitable for men of letters are ſuch as put the whole body in motion; theſe are, tennis, the ſhuttle-cock, billiards, the mall, hunting, ſkittles, bowlings, and even chuck; but theſe are unfortunately in ſuch diſcredit in many parts, that perſons who are tender of their good name would almoſt be aſhamed to be ſeen playing at them, and will not be convinced that the neglect of theſe uſeful amuſements, is one of the principal cauſes contributing to the increaſe of their diſorders. It is much to be wiſhed, that the uſe of theſe exerciſes could be reſtored, in the many academies which are now eſtabliſhed for the education of youth, and that the gymnaſtic art ſhould become, as it was formerly, a part of the maſter's care, as well as the diverſion of the young people: under this general term I comprehend young ladies alſo, whoſe ſedentary life often diſturbs their health, and I may even venture to ſay, the happineſs of ſociety *

§ 55. Learned men, earneſt in the defence of their inactivity, will perhaps avail themſelves

* Our Author might have added another exerciſe no leſs ſalutary than any he has mentioned, viz. dancing, the good effects of which, are demonſtrated by the great age to which dancing-maſters attain, and the good health and ſpirits they commonly enjoy.

of the inſtances of a few perſons, who have preſerved their health to a very advanced age without taking exerciſe; or may plead, however improperly, as we have juſt now ſeen, the inactive lives of the fair ſex, as well as of ſeveral artiſts, whoſe occupations are ſedentary, in their behalf; but they unfortunately deceive themſelves, and will find that the inſtances they alledge are not ſimilar to their own ſituations.

If indeed there are ſome women (for this cannot by any means be ſaid of the greater part of them) who enjoy a tolerable ſtate of health without taking exerciſe, it is becauſe they have other methods of promoting the circulation, of which the learned are deprived. Nature has made them more ſuſceptible of agreeable impreſſions, and has ſupplied them with a greater fund of chearfulneſs; they talk more, and converſation is itſelf a kind of exerciſe ſuited to them; they generally eat leſs; they do not exhauſt themſelves with deep thinking, ſo fatal to the learned; their ſleep is not broken by the involuntary continuation during the night of any ideas the mind has been ſtrongly impreſſed with in the day-time: a thouſand little incidents of ſociety, which a man abſorbed in ſtudy does not even perceive, are for them important enough to intereſt their paſſions to a degree ſufficient to quicken the circulation without fatiguing the organs. If ſome men of the world grow old, and preſerve their health, notwithſtanding the inactivity of their lives, it will generally be found, on examination, that they have had ſome of the ſame advantages as have been proved to be common to women.

Neither ſhould men of letters deceive themſelves with the examples of ſedentary artiſts, for their occupations are of a very different nature;

nature; they have but one inconvenience common between them, which is, the want of neceſſary motion: but even this inconvenience they are far from being equally expoſed to; for the man of letters is conſtantly ſitting every day; whereas the artiſt corrects the bad effects of the ſedentary life he leads while at work, by the exerciſe he indulges in on Sundays, and holidays: this in one part of Europe takes up rather more than a ſeventh part of the year, and in the reſt more than a ſixth. In every inſtance the difference between them is conſiderable; for although the artiſt may not ſtir from his ſeat, ſome part of his body is however always in motion; and in ſome works of art, this motion is ſufficient to make them very laborious and fatiguing, notwithſtanding the workman is always ſitting; in all of them the continuation makes ſome amends for the inconſiderableneſs of it; ſo that the ſummary of their motion at the day's end, although by no means ſufficient for health among ſeveral of them, yet amounts to more than what many of the learned uſe. Beſides, if the artiſt does not uſe the exerciſe neceſſary for quickening the action of the nerves, he does not at leaſt conſume it by ſtudy; his labour procures him ſleep, while that of the learned deprives them of it; his digeſtions are not diſturbed by thinking after meals; his method of life is more ſimple; his chearfulneſs, and ſinging at his work, ſupports him; in ſhort, in every particular the man of letters has the diſadvantage *.

§ 56.

* I do not pretend to ſay that inactivity is not hurtful to many artiſts. I know that all the arts have their inconveniencies, and perhaps the huſbandman's life is the only one which is not contrary to health; but I only mean to ſhew, that the inactivity

§ 56. However beneficial action may be, it is ſtill neceſſary to uſe it with prudence, leſt it ſhould become hurtful. The firſt thing to be attended to, is the avoiding of immoderate exerciſe, which is far from doing good, but rather exhauſts than reſtores the ſtrength. The learned, who are apt to give into extremes, paſs on ſometimes from a compleat ſtate of inaction to the moſt active life they can chuſe, imagining that a few days of hard exerciſe will compenſate for their having been a long time without any: but they are much miſtaken; for they not only waſte their ſtrength by theſe means, and find themſelves more exhauſted afterwards, but alſo their veſſels being weak, and not able to reſiſt a too ſudden increaſe of motion, are in danger of being ruptured; from whence, bleedings of the noſe, ſpitting, and even vomitings of blood, which I have ſometimes ſeen. It is with reaſon therefore that Seneca, in treating of the exerciſes proper for men of letters, forbids ſuch as exhauſt the ſpirits *; and Homobo Piſo, the Italian phyſician, who in our days wrote againſt the circulation, was of opinion, that a man who wearied his body with labour, was unfit to give a proper attention to buſineſs †.

inactivity of the learned is greater, and attended with more hurtful circumſtances, than that of ſedentary artiſts. The diſeaſes of this claſs of men ariſe from four principal cauſes; the want of ſufficient exerciſe and open air; the places they live in, which are oftentimes unwholſome; the ſubſtances they work upon, or uſe in their work; the wearineſs of particular parts of the body, on which the laborious part of their buſineſs is exerted. *T.*

* "Nam exercitationes, quarum labor ſpiritus exhaurit, "hominem inhabilem intentioni ac ſtudiis acrioribus reddit." Epiſt. 15.

† De Regimine Magnor. Auxilior. p. 378.

A ſecond precaution to be obſerved, is not to apply immediately after having taken exerciſe, and that for two reaſons: the firſt is, that reſt is neceſſary for us at ſuch a time, and that the action of the mind is not relaxation for the body when fatigued, as that of the body is for the weary mind: the ſecond is, that the circulation is quickened by exerciſe; and the brain itſelf being agitated by this increaſe of motion, is hardly in a proper ſtate for admitting a ſeries of ideas, the clearneſs of which depends upon the oſcillations being undiſturbed and regular *.

There is certainly no man of letters, who has ever found himſelf under the neceſſity of applying after having taken exerciſe ſufficient to ruffle his pulſe, and who has not at the ſame time felt a kind of unſteadineſs in his head, and that a number of ideas crowded in upon him without the neceſſary preciſion.

In the third place, it is of great conſequence to abſtain from violent exerciſe immediately after a meal; digeſtion is not brought about either by fermentation, diſſolution, or trituration ſeparately, but rather by the combination of theſe three powers; and it is a proceſs which requires tranquillity. It ſtands in need of the nervous influence, as we have before obſerved, and is therefore diſturbed, if that is otherwiſe taken up by hard exerciſe. The food is not to be inceſſantly toſſed about in the ſtomach, becauſe the action of digeſtion already begun would be diſturbed at every inſtant by this motion; and for this reaſon the trotting of a horſe hinders

* Vid. Platneri de Negotioſa Actione propter Valetudinem circumcidenda. This excellent Diſſertation, full of uſeful remarks, and written with great elegance, is a very valuable piece for all phyſicians.

digeſtion

digeſtion more than any other exerciſe that can be taken after dinner.

It may be ſtill proper to obſerve, that all exerciſe will at firſt prove troubleſome after long diſuſe, and will perhaps appear to do more hurt than good; but we are not to be diſcouraged by theſe inconveniencies; ſince they may be in great meaſure avoided by ſetting out with moderation, and going on gradually till we ſhall at laſt find ourſelves enabled to take a great deal of exerciſe without fatigue, and with the moſt evident benefit.

§ 57. When men of letters can be prevailed upon to relax their minds and take more exerciſe, they will generally eſcape the diſorders they are expoſed to; but as it is not to be expected that they will all follow the advice given to them on this head, it becomes alſo neceſſary to regulate their diet in ſuch a manner at leaſt, that their food may not increaſe the cauſes of their infirmities, but rather if poſſible contribute to leſſen them *. In Hippocrates we find a general rule for the learned as well as for all other individuals, reſpecting the quantity of food neceſſary: "Let nouriſhment (ſays he) "be proportioned to labour †:" for, as he mentions elſewhere, "if the powers of the bo-"dy exceed the force of the aliment," (that is, "if we digeſt well) it nouriſhes and gives "ſtrength to the body; but if the ſtrength of "the aliment is greater than the power of the "ſtomach," (or, in other words, if the ſto-"mach cannot digeſt it), "a number of in-"conveniencies ariſe ‡." Plutarch inſiſts much

* "*Vero è, che un letterato indefeſſo ne' ſtudi ſe uſi un vitto* "*regolato, innocente, e parco provare più ſoffribili gl'incommodi* "*di ſua profeſſione.*" *Felici Diſſertat.* p. 203.

† Ὡς ὁ πονος ἐστι καὶ ἡ τροφη.

‡ De Locis in Homine, p. 421. and in other places.

upon

upon this reciprocal proportion between the degree of exerciſe and the quantity of food requiſite for the preſervation of health; and we ſhall be convinced of its importance, if we call to mind what I have before proved, that it is the action of the different organs which extracts from the food juices ſimilar to our humours, and changes them to our own proper ſubſtance. If theſe organs, the chief of which is the ſtomach, are too weak to act upon a great quantity of food, or ſuch as is difficult of digeſtion, the food then, inſtead of being aſſimilated or converted into our ſubſtance, becomes putrid, and, as I have before obſerved, § 20, degenerates into that kind of putrefaction peculiar to its nature, and remains in the ſtomach an extraneous body, which irritates and affords no nouriſhment. The powers of theſe organs are therefore to be attended to; and among the learned there are ſo many circumſtances tending to impair them, that they cannot expect to preſerve them long: beſides, even when their digeſtions are well performed, they ſhould conſider that they perſpire but little, and for that reaſon abſtinence is of conſequence to them, to prevent the miſchiefs mentioned in § 23. p. 54. Let them compare themſelves to the robuſt ploughman, and judge whether they can bear the ſame kind of diet. The one is always in the open air, always in exerciſe, always chearful, and never fatigues himſelf with thinking: his ſleep being calm and regular, and his ſecretions well performed he is always in perfect health: the hardeſt kind of food is not too difficult for his ſtomach, becauſe he has all the properties neceſſary to digeſt it; his teeth being good, he begins by chewing it well; whereas moſt learned men ſwallow their victuals without

out chewing. In the ploughman, the ſaliva, the digeſting fluids of the ſtomach, the pancreatic juice, the bile, the inteſtinal juices, are all in a higher ſtate of perfection, becauſe the organs which ſecrete them are ſound; the muſcular fibres of the ſtomach and bowels act with force: in ſhort, none of the offices are languidly performed, the excrements are properly expelled, the chyle is conveyed without interruption into the blood-veſſels, in which it is ſoon changed into good blood, the ſuperfluous parts of which are carried off by urine and perſpiration, and the body is preſerved in a perfect equilibrium.

If light broths, niceties, jellies, chicken, or white bread, are given to a hard working man, he will have digeſted them in a very little time; he will ſoon grow hungry, be in a general ſweat and faint away, unleſs quickly ſupplied with bacon, ſmoke-dried meat, cheeſe, or brown bread. If a man of a tender conſtitution attempts to live upon ſuch food, he will be ſeized with violent pains in the ſtomach, or with anxieties more troubleſome than pain; he will have powerful indigeſtions, and the aliments putrefying, will become a kind of poiſon, productive of the moſt fatal conſequences. The learned have been appriſed of this danger by M. Boerhaave: "There are ſome men of letters, ſays he, of greedy appetites, who venture to live upon the ſame food as the country people do, but they cannot digeſt it; they will find themſelves obliged to give up their ſtudies or change their diet; or elſe tedious and painful obſtructions in the bowels will be the effects of their indiſcretion *.

* Prælect. ad Inſtit. § 1036. t. 7. p. 337.

§ 58. The

§ 58. The learned ought to attend to the quantity as well as the quality of their food; errors in each of theſe circumſtances are of bad conſequence; but I may venture to aſſert, that if we muſt give into either of theſe errors, it may be leſs hazardous to chuſe food of an improper kind (which indeed we may be ſometimes obliged to do), than to indulge in eating too much, which never can be neceſſary.

It is not my intention to give an exact liſt of all aliments which may be injurious or uſeful: I ſhall only ſpecify the general claſſes of ſuch as are to be avoided, and ſuch as may be indulged in.

Thoſe which are improper are, in the firſt place, all kinds of greaſy aliments: they increaſe the relaxation of the fibres of the ſtomach, blunt the action of the ſaliva of the juices inſervient to digeſtion, of the bile, of the juices of the inteſtines, the properties of all which are already too much weakened; by the tedioufneſs of their digeſtion, they cauſe an uneaſy weight on the ſtomach, and degenerating into putrefaction, become at firſt acid, then rancid, and produce the ſymptoms of violent irritation in theſe parts.

2dly, All food of a viſcous, gluiſh, or ſlimy nature, acts nearly in the ſame manner as the greaſy aliments. Theſe two claſſes comprehend all fat paſtry, all things that are fried, fritters, creams, the feet of animals, &c.

3dly, We may reckon among the improper aliments all ſuch as contain a great quantity of air, which expanding itſelf, and not being ſufficiently confined, by weak organs, nor diſperſed in proportion as it expands, produces conſiderable ſwellings, always attended with a ſenſation of uneaſineſs throughout the whole body,

and eſpecially of confuſion in the head, which diſturbs its functions. This kind of property made the ancients forbid the uſe of all vegetable ſeeds, and induced Pythagoras, who in other reſpects recommended a vegetable diet, to lay a particular injunction upon his ſcholars not to eat beans *.

4thly, Meats naturally tough, or hardened by ſmoke and ſalt, are to be avoided; for the digeſtive powers act too ſlowly upon ſuch ſubſtances; they ſtay a great while in the ſtomach; produce, firſt, irritations by their weight and acrimony; become putrid by remaining ſo long in the ſame place; and this putreſcency afterwards increaſes the irritation.

5thly, Men of letters muſt abſtain from food which is very ſour; for we have ſeen that they are much ſubject to acidities in the ſtomach; as alſo from any nouriſhment irritating too much, from any other kind of acrimony which may be hurtful to their delicate and irritable nerves.

* The air let looſe from the aliment is one of the chief agents in digeſtion; we could not live long upon food from which the air had been expreſſed: but this air ſo uſeful and ſo neceſſary when the organs are in a ſound ſtate, becauſe at that time a leſs quantity is ſet free, becauſe the expanſion of it is gradual, becauſe it is governed and employed again as the expanſion takes place by the action of the ſtomach and inteſtines, becomes hurtful when the digeſting powers are weakened; becauſe, as we have already ſeen, the aliments putrefying ſooner than they are digeſted, a much greater quantity of air is ſet free; becauſe the food gets forward but ſlowly, and remains a long time in the ſtomach: this organ, therefore, becomes loaded with a body of air, which ſhould have been diſtributed throughout the whole inteſtinal canal; becauſe, laſtly, this air being more powerful than the organs containing it, if I may venture to uſe this expreſſion, is not governed by them; but being collected and rarefied every moment by the heat, its bulk is prodigiouſly enlarged, ſo that ſharp pains are brought on, digeſtion is interrupted, the viſcera of the abdomen are compreſſed, their functions diſturbed, and ſometimes inflammations are brought on. *T.*

§ 59. The

§ 59. The moſt ſuitable kind of food is, in the firſt place, the tender fleſh of ſuch young animals as are generally ſerved up at tables, except that of pork, geeſe, or ducks. 2dly, All ſhell fiſh which is firm and tender, either from the ſea, rivers, or ſtanding waters. 3dly, The grains of corn, ſuch as the different kinds of wheat, rye, barley, rice, oats: we muſt not even think that all the ſeeds of vegetables are hurtful: although they contain more air than the others, I have never obſerved that a moderate uſe of them was injurious to perſons whoſe ſtomach was not quite deſtroyed. Some of theſe ſeeds, when boiled, compoſe the different ſoups commonly known under the name of farinaceous broths, which, whether they are made with water alone, or with the addition of meat, according to the circumſtances, are a very nutritious kind of food, eaſy of digeſtion, and which may be uſed with great ſucceſs in many caſes. The wheat and the rye make the bread, of which I ſhall ſpeak preſently. 4thly, All herbs which are not too relaxing or too acid, are to be reckoned among the aliments proper for ſtudious men; the different ſpecies of endive are the moſt wholſome among theſe. 5thly, We may reckon alſo moſt of the common roots, the nutritious parts of which conſiſt in their farinaceous ſubſtance, as in the ſeeds; beſides that moſt of them are impregnated with a very ſweet juice, which being a mixture of oil and ſalt, is very ſalutary *.

* All the culinary roots, and undoubtedly many others, are full of an excellent kind of ſugar, not inferior to that of the ſugar-cane, and which may eaſily be extracted from them; eight ounces of the juice of ſkirret yield one ounce and a half of ſugar. *Margraff. Mem. de L'Acad. de Berlin.*

6thly, Bread, the common nouriſhment of all civilized nations, and of which ſome equivalent ſubſtitute is to be found in uſe among the generality of mankind, muſt not be omitted here. 7thly, Eggs. 8thly, Milk. 9thly, The fruits are to be conſidered as proper food. But the uſe even of theſe aliments may be made ſtill more beneficial, by attending to ſome obſervations very neceſſary to be made.

§ 60. With regard to the tender meats, we muſt eat them roaſted or boiled in a very ſmall quantity of water: if they are boiled in a large quantity, the water becomes impregnated with all the nutritious particles, and nothing remains but a dry fibre, which cannot ſupply any nouriſhment. Beef which is tender, good veal, mutton fed in dry places, fowls, chickens, capons, and pullets, if not overloaded with fat; turkeys, young pigeons, partridges, and larks, are the moſt proper meats for perſons of delicate ſtomachs; and perhaps they ought to confine themſelves to ſuch ſort of food.

Fiſh without ſhells, fiſh from ponds, or thoſe which are too fat, flabby, or ſlimy, are bad nouriſhment; they ought to be avoided as pernicious; and in general, the moſt wholſome way of dreſſing fiſh, is by boiling them in water.

New-laid eggs, either raw or boiled a little in the ſhell, are a kind of food ſoft, not inflammatory, and of eaſy digeſtion; but they become hurtful, when not exceedingly freſh, and if boiled hard, are not to be digeſted without much difficulty; otherwiſe they are very proper for perſons ſubject to acidities; and thoſe who cannot bear them whole may find it very uſeful to eat the white of the egg only, which

is

is more readily digeſted, and very ſtrengthening *.

Milk, the mildeſt and moſt digeſtible of all aliments, is alſo very proper for men of letters, if they are not troubled with acidities, or if they do not mix it with other food which might alter its properties or with ſubſtances of difficult digeſtion, which might retain it a long time in the ſtomach, and be taken alone, or with a little bread, after the digeſtion of other aliments is compleated.

Chocolate may be mentioned next after milk, and is rather to be reckoned among the aliments than the drinks: it is the decoction of a ſeed compoſed of two parts; a ſoft, nouriſhing, digeſtible kind of meal, and a greaſy, bitter, ſharp oil: this mixture makes it a ſpeedy reſtorative and ſtrengthener; but it muſt not be uſed too freely. The cocoa nut is too nouriſhing for plethoric perſons; it increaſes the quantity of blood and heats them; being greaſy, it ſometimes lies heavy on the ſtomach, does not digeſt well, takes away the appetite, makes the body coſtive, and is generally improper when there are any obſtructions: at other times it turns ſour. The addition of ſugar makes it more eaſy of digeſtion; but aromatics, eſpeci-

* If we were not ſatisfied of this fact from experience, it might have been concluded from the circumſtance of the white being the firſt nouriſhment of the chicken, and that the yolk only becomes uſeful to it in the laſt days of its confinement. And, if the accounts of ſome travellers may be credited, the yolk of the Tavon's egg, a kind of ſea-hen in the Philippine Iſlands, never ſerves for the nouriſhment of the little animal; ſo that when he is hatched, the yolk is found entire in the ſhell. But how are we to reconcile this obſervation with others, which prove inconteſtibly that the yolk is itſelf a part of the animal? T.

ally the vanilla and ambergreaſe †, make it unwholeſome to ſeveral people, and injurious to all inflammatory conſtitutions, who are much inclined to have blood derived to the head.

§ 61. The fruits moſt in uſe are cherries, ſtrawberries, raſberries, currants, gooſeberries, mulberries, the different ſorts of plums and peaches, melting pears, apricots and grapes. They are not all equally wholeſome: cherries, mulberries, peaches, melting pears, and grapes, ſeem to be beſt. Their ſwelling property, and being likely to turn ſour, might induce us to think they were not proper for the learned; neither indeed would I adviſe to eat them in too great a quantity, or to perſevere too long in the uſe of them †. But in enumerating the evils we are expoſed to by ſtudy, it has been obſerved, that one of the moſt terrible of them is the ſtagnation and thickening of the bile, which theſe fruits are beſt calculated to prevent or cure; their juice is the mildeſt, moſt diſſolving, moſt pleaſant, moſt nutritious and fortifying of all the ſaponaceous juices. It keeps the bile in its fluid ſtate, removes obſtructions, encourages the periſtaltic motion of the inteſtines, diſſipates that melancholy which proceeds from obſtructions in the lower belly, and is particularly ſerviceable to that claſs of the learned mentioned

† The French word "de l'ambre," is often uſed by perfumers for ambergreaſe.

† With reſpect to the uſe of fruit, I ſhould imagine our Author's advice were better calculated for Switzerland or the South of France than for this climate, where we cannot expect them in ſuch perfection, as in the more ſouthern countries, and conſequently ought not to indulge ſo freely in uſing them.

§ 44. who are ſubject to inflammatory fevers, or ſuch as are liable to hectics proceeding from want of moiſture, or from the putrid acrimony of the humours: theſe fruits are alſo moſt ſpecifically uſeful in the diſorders mentioned § 22, which ariſe from a corruption of the bile. When we are troubled with acidities; when the ſtomach and inteſtines are in too great a ſtate of relaxation; when the whole body is flabby, the blood too much diſſolved, and the ſtrength exhauſted, we are then to abſtain from them. Even thoſe perſons whom they are fit for, eſpecially the learned, whoſe ſtomach always requires care, will find it better to eat them between meals when the ſtomach is empty, than immediately after dinner; better to eat them alone, or with a little bread, than to mix them with other food; and above all, they will find it neceſſary to drink only water over them, which is the proper fluid for them to macerate in, whereas wine makes them hard and ſour.

§ 62. It is impoſſible to lay down general rules for the choice of diet; but every individual muſt regulate it by obſerving what agrees or diſagrees with him. Some people can digeſt meat rather than vegetables, which are apt to give them an uneaſy ſenſation at the pit of the ſtomach, and they therefore ought to uſe them with great circumſpection; others they agree with better than meat, which they cannot eat freely of without being troubled with anxieties, reſtleſsneſs, oppreſſion and fever. In general, vegetables are thought the moſt proper food for men of letters: Plutarch will not even allow them the uſe of meat, which he ſays impairs the underſtanding. In ſupport of this ſyſtem it may be urged, that we have inſtances of ſeveral philoſophers, famous for their talents and

and the extent of their knowlege, who always uſed to abſtain from meat; ſuch as Zeno, Plotinus, and Chryſanthus. The late M. Cocchi, a celebrated Florentine phyſician, has written a very intereſting diſſertation on this ſubject *: but yet I think it neceſſary to obſerve, that it would be very injudicious to confine the learned entirely to a vegetable diet, which might be of real bad conſequence to many of them. Galen, Sethi, and Plempius, all agree in recommending river fiſh as one of the moſt wholſome aliments for ſtudious men, as being lighter on the ſtomach than meat. I have ſeen ſome men of learning who were always troubled with acidities when they eat bread, and who were therefore obliged to eat it very ſparingly. Eggs diſagree with many perſons, and yet no reaſon can be aſſigned for it; the ſame thing may be ſaid of milk; ſo that it becomes abſolutely neceſſary to conſult the ſtomach in the choice of our diet.

§ 63. Although the moſt ſimple way of dreſſing victuals is the moſt wholſome, yet ſeaſoning is by no means to be excluded from the diet of the learned. The looſe fibres of their ſtomach, the action of which is not excited by motion, ſtand in need of ſome ſlight provocatives to get the better of their numbneſs; theſe are ſalt, ſugar, ſome mild aromatics, as cinnamon, nutmeg, and eſpecially thoſe more wholſome aromatics to be found in our gardens, thyme, marjoram, ſweet baſil, chervil, fennel, and others of the ſame claſs: but thoſe ſtimulators are to be avoided, which being loaded with an oil or ſalt of an exceſſively-acrid nature,

* Del vitto Pittagorio per uſo della Medicina. Fiorenza, 1744.

irritate

irritate too powerfully, and continue acting for too long a time. All men of learning, in imitation of Horace, ſhould deteſt garlic, and abſtain from muſtard and pepper, which are impregnated with an almoſt cauſtic eſſential oil. They ought even to guard againſt a too copious and too frequent uſe of the mildeſt ſeaſoning, which ſhould never be conſidered as part of the common food; for every thing that irritates increaſes the circulation, wears out the organs, and ſhortens life.

§ 64. One of the dietetic rules of moſt conſequence to health, and which becomes more particularly neceſſary to a weak ſtomach, is to avoid mixing a great variety of food together, and never to eat of more than two or at moſt three diſhes at one meal; thoſe who confine themſelves to one are ſtill more prudent. I know a worthy old man, who finding himſelf very ſickly at forty years of age, took a reſolution never to eat of more than one thing; he kept his word, and has now reached his ninetieth year in perfect health, ſtill enjoying the powers of his mind, and the quickneſs of his ſenſes. If we reflect a little on the ſurpriſing variety of meats our tables are covered with, and the number of different things we load our ſtomachs with in a ſhort time, we ſhall be apt to think few cuſtoms are more ridiculous: but if we obſerve the effects, we ſhall be convinced that none are more dangerous. Let us learn from Horace on this ſubject; his advice may perhaps be more agreeably received, and followed with more confidence, than that of a phyſician. "Let us now conſider (ſays he) "what are the advantages of temperance. Firſt, "it always brings good health with it. To be "convinced of it, we need only recal to our

"minds

" minds ſome of thoſe plain meals which have " agreed with us ſo well: but when we come " to mix game and fiſh with ragouts and roaſt " meats, the ſofter food is changed into bile, " and a viſcid phlegm breeds a variety of miſ- " chiefs in the ſtomach *."

§ 65. However wholſome and ſimple the food of the learned may be, if ſtill taken up with their ſtudies, they eat without chewing, a cuſtom I have before complained of; they deprive themſelves of one of the moſt uſeful helps to digeſtion. Nothing relieves the ſtomach ſo much as a proper maſtication; it increaſes the ſecretion of the ſaliva, which is one of the moſt powerful of the juices inſervient to digeſtion †, and mixes it intimately with the food, the ſurface of which it extends by comminution, and makes the juices of the ſtomach penetrate into it with more eaſe: the diſſolution therefore of the aliments being quickly performed in the ſtomach, they ſtay there for a leſs time, are digeſted, and do not putrify: for the ſame reaſon the ſtomach is not irritated nor fatigued; all the remaining functions feel the effects of this firſt digeſtion well performed, and are executed with eaſe. There are two more advantages attending maſtication; one is, that we eat a leſs quantity of food, and are ſupplied with an equal ſhare of nouriſhment by it; the other, that it contributes greatly to the preſervation of the teeth: in ſhort, health depends ſo much upon it, that its advantages are ineſtimable; and we cannot inſiſt too ſtrongly upon the injuries too frequently ariſing from the neglect of it.

* Accipe nunc victus tenuis quæ quantaque ſecum
Afferat, &c. Satyr. 2. li. 2.

† Macbride's Experimental Eſſays, p. 15, 54, &c.

§ 66.

§ 66. As men of letters digeſt ſlowly, they ought not to eat too often; for there is great difference in the ſtate of a ſtomach wherein ſome half-digeſted food remains, which requires all the powers of digeſtion to finiſh its diſſolution, and one entirely empty, which has recovered its powers, and is well moiſtened with digeſting fluids ready to act upon freſh food. Whatever is taken into the ſtomach in the firſt ſtate diſturbs the digeſtion already begun, and cannot go through the firſt changes neceſſary to produce a good digeſtion; it is therefore of great conſequence to ſtudious men to avoid eating at improper times: three meals in the day are quite ſufficient for them; two very ſlender, and one a little more plentiful. I have ſeen perſons who had injured their ſtomachs and health by ſtudy, recover by adopting the method of life I had preſcribed to them, together with ſome directions with regard to the choice of their food, a detail of which would be improperly placed here. When they roſe in the morning they drank a glaſs of cold water, breakfaſted an hour afterwards, and ſtudied for four or five hours; they then took ſome kind of exerciſe during an hour at leaſt, and dined after having reſted themſelves a little. The hours immediately after dinner were employed either in a gentle walk, or in ſome ſocial duties which neither fatigued the body nor the mind; they ſtudied again for a few hours in the evening, and then took a very light ſupper, which circumſtance is of great conſequence to the learned on ſeveral accounts. The firſt is, that the blood being carried in greater quantity to the head while we are aſleep, it is dangerous to increaſe the fulneſs of the veſſels by

a hearty

a hearty meal before we go to-bed *: the ſecond is, that the action of the nerves being diminiſhed during the time of ſleep, digeſtion, to which that action is neceſſary, will not be ſo well performed: the third is, that the ſleep of the learned being never very ſound, if a great quantity of food happens to be in the ſtomach at that time, it irritates and keeps the nervous ſyſtem in ſuch a ſtate of agitation, that reſt is entirely diſturbed; they are not quite awake, becauſe their ſtrength will not allow them to be ſo; neither do they ſink into ſleep, for they cannot enjoy that profound tranquillity which conſtitutes it; and this kind of ſtate fatigues them exceſſively, and injures their health. Theſe inconveniencies are prevented by light ſuppers, ſuch as Plato uſed himſelf to, which were ſaid to be pleaſant at the time, and continued ſo for the next day; ſuch as leave the body healthy, and the mind free: whereas, on the contrary, the head is incumbered by a plentiful ſupper, the body fatigued, the mind depreſſed, and unfit for ſtudy †.

I have known ſome men of letters who have

* The fulneſs of the veſſels of the brain during ſleep is proved by a number of phænomena: a circumſtance occurs to us every day which manifeſtly ſhews it; I mean that grinding of the teeth we ſee in many children, and which ſome adults are even ſubject to in their ſleep; and it is always much ſtronger after a plentiful ſupper. T.

† "Vides ut pallidus omnis
"Cœnâ deſurgat dubiâ? quin corpus onuſtum
"Heſternis vitiis animum quoque pregravat una,
"Atque affigit humo divinæ particulam auræ.
"Alter, ubi dicto citius, curata ſopori
"Membra dedit, vegetus præſcripta ad munera ſurgit."
HOR. ſat. 2. lib. 2.

Theophraſtus has alſo obſerved, "that by plentiful eating "and feeding much upon meat, reaſon becomes weak, the "mind grows heavy, and a kind of ſtupidity comes on." T.

recovered

recovered their health only by taking a little milk at night. It may be urged by ſome, that it would be ſtill better not to take any ſupper. This is a cuſtom with ſome people whom it agrees with; but it ſhould by no means be adopted indiſcriminately by all the learned. Some of them have the ſtomach ſo exceedingly irritable, and the nerves ſo delicate, that if they ſtay a long time without taking any thing, the juices inſervient to digeſtion acquire an acrimony, which not being ſheathed by mixing with the food, irritates the ſtomach; and this irritation is ſufficient to diſturb ſleep.

§ 67. Thoſe who take pleaſure in eating may be apt to look upon theſe rules as ſo many auſterities, which have never been ſtrictly complied with; and which it might even be dangerous literally to adhere to: but they may be eaſily convinced to the contrary, from a great number of inſtances, which prove that a degree of abſtinence much more ſevere than that I have indicated, is the real method of preſerving health. Auguſtus, whoſe infirmities, as we have ſeen, were very analogous to ſuch as men of letters are liable to, may be propoſed as a model of temperance; for he confined himſelf to the ſmalleſt quantity of food *. Paul the hermit, St. Anthony, Arſenius, and St. Epiphany, not to mention many other recluſe perſons whoſe long life is not ſo well atteſted, lived beyond a century, feeding only on bread, dates, roots, a little fruit and ſome water. Galen mended his bad conſtitution by exerciſe and very remarkable abſtemiouſneſs. Bartholius, the celebrated reſtorer of right in the fourteenth century, is, if I miſtake not,

* Minimi cibi erat. Suet.

the firſt perſon who ever weighed his food; he reduced it to a very ſmall quantity, in order to preſerve his faculties equally diſpoſed at all times for ſtudy, to which he applied himſelf with uncommon diligence *. But one of the moſt ſtriking, as well as moſt uſeful examples, is that of Lewis Cornaro, a noble Venetian, of one of the moſt ancient families, and of the number of thoſe which ſupplied the republic with moſt of its doges. At the age of twenty five he found his ſtomach diſordered, was troubled with pains in his ſide, and felt the beginnings of the gout, and a hectic fever: notwithſtanding a variety of medicines, at forty years of age, he ſtill continued in a bad ſtate of health; he then laid aſide the uſe of medicines, and led a very abſtemious kind of life, confining himſelf to twelve ounces of ſolid food, and fourteen ounces of fluid every day, which was not more than the fourth part of a man's common food in the country where he lived. The effects of this diet, as related by himſelf, in a ſmall work intituled, The Advantages of a Sober Life †, were ſo remarkable, that his infirmities gradually diſappeared, and were ſucceeded by vigorous and ſound health, accompanied with a ſenſation of happineſs and ſatisfaction he had never before experienced. At

* An anecdote of the life of Bartholius has been preſerved, which is rather unfavourable to learning, and affords a too convincing proof of the dangers we are expoſed to of falling into a hypochondriac diſpoſition by intenſe application to ſtudy, and being affected with miſanthropy and moroſeneſs. He was inveſted with a conſiderable office of judicature, and condemned thoſe who were tried before him to death upon the ſlighteſt ſuſpicion: this made him ſo hateful to the people, that he was obliged to retire into the country to ſcreen himſelf from their fury. *T.*

† Luigi Cornaro diſcorſi della vita ſobria.

ninety-

ninety-five years of age he wrote a work upon the birth and death of man, in which he drew a very intereſting picture of his own life. "I "find myſelf healthy and ſprightly as at the age "of five-and twenty: I write ſeven or eight "hours in the day; the reſt of my time I take "a walk, join in converſation, or bear my part "in a concert: I am chearful, eat every thing "with appetite; my imagination is lively, my "memory good, my judgment ſound; and "what is ſtill more aſtoniſhing at my age, my "voice is ſtrong and harmonious." He lived beyond one hundred years. Leonardus Leſſius, the learned Flemiſh Jeſuit, was ſo well pleaſed with Cornaro's method of living, that he tranſlated his Treatiſe on Temperance into Latin; lived in the ſame manner himſelf with the greateſt benefit; and compoſed, upon the ſame principles, a Treatiſe on Diet, in which he demonſtrates the advantages of a temperate life *. Ramazzini has handed down to us the Hiſtory of Cardinal Sforza Pallavicini, who, after having ſtudied all day without taking any thing, contented himſelf with a very light ſupper in the evening †. And to come nearer to our own times, the immortal Newton, who lived to a very advanced age, even when he was engaged in his moſt profound reflections, never took any thing but a little bread and water, and ſometimes a ſmall quantity of Spaniſh wine; and during the whole courſe of his life, he never indulged in any thing elſe, except a little

* Leon. Leſſii Hygiaſticon, ſeu vera ratio valetudinis bonæ. Antwerp, 1563.

† "Totam diem litterarum ſtudio ſine cibo largiebatur, mox "cœnâ modicâ ſumptâ ac ſtudiorum curâ ablegatâ, ſomno & "virium reparationi noctem totam impendebat." De Litteratorum Morbis Diſſertatio. Opera omnia, p. 654.

chicken. The famous M. Law *, one of thoſe men who has exerted the powers of his mind in the ſtrongeſt manner, confined himſelf for ſeveral years, in order to keep his head free, and preſerve the quickneſs of his underſtanding, to one half of a chicken, and about a pound of bread every day, and drank nothing but water or watery liquors; † and indeed the choice of this ſort of drink may be conſidered as one of the moſt effectual means of preſerving health.

§ 68. Water is a drink nature has given to all nations, made it agreeable to all palates, and endowed it with the property of diſſolving the aliment. The Greeks and Romans conſidered it as a panacæa, and not without reaſon; for it is certainly a very efficacious medicine in all caſes where moiſture is deficient, when we are troubled with acidities, or when the bile has acquired too much ſharpneſs. Soft, freſh, clear ſpring water, which readily forms a lather with ſoap, boils vegetables well, and is proper for waſhing linen, is to be preferred to any other: when it has all theſe properties combined, it aſſiſts digeſtion very much; ſtrengthens, keeps up all the evacuations, prevents obſtructions, makes ſleep more calm, the head more clear, chearfulneſs more laſting, and the manners more gentle. If the effects of wine are compared with theſe, we ſhall find every part of the compariſon in favour of water.

§ 69. Wine acts as a ſtimulus; it irritates and increaſes the oſcillation of the fibres, an

* Author of the book on money and Trade, and projector of the Miſſiſſippi and South Sea ſchemes; he was a native of Edinburgh.

† Cheyney's natural Method of curing the Diſeaſes of the Body, &c. Part II. ch. ii. § 4.

effect

effect which muſt neceſſarily ſhorten life, if too frequently produced; it is apt to turn ſour, and therefore adds to the acidities the learned are already ſubject to: it is indeed attended with another inconvenience peculiarly injurious to them, and which ſhould of itſelf be ſufficient to diſſuade them from the uſe of it: this is, that it derives the fluids powerfully to the head, and conſequently increaſes the diſorders of that part, to which ſtudy has already much contributed. Head-aches are ſeldom relieved and apoplexies never prevented, unleſs this drink is forbidden, the daily uſe of which rather interrupts than aſſiſts digeſtion in perſons whoſe ſtomach is weak. It has been often obſerved, that water-drinkers had the underſtanding more clear, the memory more ſteady, and the ſenſes more quick. Demoſthenes, G. Naudé, Tiraqueau, M. Locke, and M. Haller, never drank any thing but water: moſt of our greateſt men, as well as men who have lived to an advanced age, have drank but very little wine, for this liquor is very hurtful in all diſorders of the nerves, with which the learned are ſo much afflicted. They are indeed ſo unavoidably produced by ſtudy, that I make no doubt but that the love of the ſciences, which has prevailed ſo univerſally for theſe hundred years paſt, is one of the principal cauſes of the preſent increaſe ſo remarkable in diſorders of this kind *; which might

* The diſeaſes of the nerves are much more frequent and various than they were ſixty years ago: this is a fact commonly known and generally complained of. Every body obſerves and aſks the reaſon of it. There are many to be alledged, and I ſhall here point out the chief of them. 1ſt. The love of the ſciences and cultivation of literature is more extended: we might ſay, as Cicero formerly ſaid of the gods, It is more eaſy to meet with an academician than a man. The number of

might be more eaſily cured by proper diet, exerciſe, abſtaining from warm liquors and wine, than

printing-preſſes continually at work in Europe, the infinite variety of writings daily coming from them, neceſſarily implies a great number of men, who although they may not all be learned, are yet more or leſs expoſed to the ſame diſeaſes as the learned men; among which the diſorders of the nerves are reckoned. So many authors give riſe to a number of readers, and conſtant reading produces nervous complaints; ſo that perhaps of all the circumſtances hurtful to the health of women, the chief has been the innumerable collection of novels publiſhed within theſe hundred years. From the earlieſt infancy to the moſt advanced old age, they read them with ſo much eagerneſs, that they are apprehenſive of a moment's interruption, take no exerciſe, and often ſit up very late to ſatisfy this inclination; by which their health is entirely deſtroyed. To theſe I might add the women who are turned authors, the number of which increaſes daily. A girl at ten years old, who ſits herſelf down to read, when ſhe ought to be running about, will be an hyſteric woman at twenty, and not a good nurſe as ſhe ſhould be. 2dly. The uſe of warm liquors becoming much more common, the dangers of which I have ſet forth in the enſuing paragraph. 3dly, The increaſe of luxury, which brings on a more effeminate kind of life, both among maſters and ſervants, and has multiplied prodigiouſly the number of the ſedentary arts; the eſtabliſhing of which, however boaſted of, has deſtroyed at once both agriculture and health. I have ſeen in this country ſome villages, whoſe inhabitants were all employed in cooper's work, whoſe life was taken up in going to cut down the trees in the woods, making them into caſks, and carrying them to market; and in this diſtrict were found the handſomeſt, ſtrongeſt, moſt healthy men of the country, and who lived in the greateſt plenty. Thirty years ago ſome jewellers ſettled themſelves in this place, money became more common and ſeduced the people, the love of jewels prevailed, cooper's work was neglected, a ſedentary life ſucceeded to an active one, ſtrangers were hired to cultivate their lands; at laſt the new profeſſion failed alſo, and it is at preſent a part of the country where languid diſeaſes prevail moſt, where the men are degenerated, and from whence plenty and eaſe are fled, perhaps never to come back again, ſince they always leave thoſe countries in which the men are weak and indolent. Many people who waited on themſelves thirty years ago, now make themſelves be waited upon: many who then walked, now go on horſeback; others who then went on horſeback, now ride in a carriage: the public carriages even are thought too rough for them; and we ſhall ſoon ſee the time, when the meaneſt artiſts

than by any medicines. I would not have it thought, however, that I entirely forbid the uſe of wine to men of letters; only I would not have it uſed as a common drink, but rather conſidered as a medicine. We could not indeed find a more agreeable, or more efficacious medicine, in all caſes of much relaxation, weakneſs, or dejection: we ſhould then take it as M. Newton did, inſtead of ſolid food, to ſtrengthen ourſelves after uncommon fatigue; to enliven ourſelves after having been much exhauſted; and to ſupport ourſelves under afflictions. At all other times men of application ought to give it up entirely; neither need they be apprehenſive of breaking through an old cuſtom, for it is not attended with any danger; ſo that out of one hundred perſons who may ſuddenly leave off wine, we ſhall not

artiſts will not travel without coaches well hung upon eaſy ſprings. People live more in towns than they uſed to do; the uncertain term of education is attended to; and, without knowing the ideas annexed to it, they come into towns for the education of their children, where health, and oftentimes virtue, is the forfeit. Inſtead of which the children acquire, 4thly. more paſſions: theſe are neceſſarily brought into play by the luxurious way of living prevalent in towns; they increaſe vanity, luſt, ambition, and jealouſy; injurious paſſions, deſtructive of health, and productive of all nervous complaints; which deſtroy the ſocial connections, friendſhip, and chearfulneſs ſo beneficial to mankind. 5thly. A fondneſs for high food, of a much more inflammatory nature, which muſt neceſſarily waſte the organs, bring on weakneſs, ſlow fevers, and all nervous diſeaſes. 6thly. A degeneration which is unavoidable. The diſorders of parents are transferred to the children. Our anceſtors began by going a little aſtray from the moſt wholeſome kind of life; our grand-fathers therefore were born weaker than our anceſtors, were more delicately brought up, and have begotten children ſtill weaker than themſelves; and we, of the fourth generation, have ſcarce any ideas of ſtrength and health, except among old men of fourſcore, or from hearſay. To bring them back again to us, would require a reaſonable conduct we cannot expect, or a few ages of barbariſm, we dare not even wiſh for. 7thly. The effects of ſecret diſeaſes. *T.*

find

find two who will ſuffer any inconvenience from it. When men of letters think wine neceſſary for them, they ſhould chuſe a ſtrong-bodied nouriſhing kind of wine, neither ſharp nor ſour, and which may ſtrengthen them without irritating; on the contrary, they ſhould carefully abſtain from all thoſe ſmall wines, which, as Van Helmont ſays, are rather a ſort of vinegar than wine, and therefore produce acidities, interrupt digeſtion, and irritate the nerves.

§ 70. There is another kind of drink not leſs hurtful to ſtudious men than wine; and which they uſually indulge in more freely; I mean warm liquors, the uſe of which is become much more frequent ſince the end of the laſt century. A fatal prejudice inſinuated itſelf into phyſic about this period. A new ſpirit of enthuſiaſm had been excited by the diſcovery of the circulation: it was thought neceſſary for the preſervation of health to faciliate it as much as poſſible, by ſupplying a great degree of fluidity to the blood, for which purpoſe it was adviſed to drink a large quantity of warm water. Cornelius Bontekoe, a Dutch phyſician, who died afterwards at Berlin, firſt phyſician to the elector of Brandenburgh, publiſhed in 1679 a ſmall treatiſe in Dutch, upon tea, coffee, and chocolate, in which he beſtows the moſt extravagant encomiums on tea, even when taken to the greateſt exceſs, as far as one or two hundred cups in a day, and denies the poſſibility of its being hurtful to the ſtomach. This error ſpread itſelf with ſurpriſing rapidity all over the northern part of Europe; and was attended with the moſt grievous effects. The æra of its introduction is marked by an unhappy revolution in the account of the general ſtate of health

health at that time. The miſchief was ſoon noticed by accurate obſervers. M. Duncan, a French phyſician ſettled at Rotterdam, publiſhed a ſmall work in 1705, wherein we find, amidſt a great deal of bad theory, ſome uſeful precepts againſt the uſe of hot liquors *. M. Boerhaave ſtrongly oppoſed this pernicious cuſtom; all his pupils followed his example, and all our eminent phyſicians are of the ſame opinion. The prejudice has at laſt been prevented from ſpreading, and within theſe few years ſeems to have been rather leſs prevalent †; but unfortunately it ſubſiſts ſtill among valetudinarians, who are induced to continue theſe pernicious liquors, upon the ſuppoſition that all their diſorders proceed from a thickneſs of blood. The tea-pots full of warm water I ſee upon their tables, put me in mind of Pandora's box, from whence all ſorts of evils iſſue forth, with this difference however, that they do not even leave the hopes of relief behind them; but, on the contrary, by inducing hypochondriac complaints, diffuſe melancholy and deſpair.

§ 71. The ſophiſtry which has induced perſons of a weak habit to indulge in warm liquors, is eaſily deſtroyed. It is true indeed, that the circulation in them is ſometimes weak, ſlow, and languid; that their fluids are apt to ſtagnate and form obſtructions: but theſe accidents proceed from a weak tone of the veſſels,

* P. Duncan Avis ſalutaire contre l'Abus du Caffé, du Chocolat, et du Thé. Rotterd. 1705, 8vo. This work is not to be found now.

† Coffee and tea are forbidden in Sweden, and I am informed by the public news-papers, that a whole conſiderable province in Germany has voluntarily given up coffee, as the Engliſh colonies in America have left off drinking tea. *T.*

not

not from a denſity or inſpiſſation of the fluids, whoſe conſiſtence is rather deficient in ſuch perſons. If we bleed a ſtrong labouring man, and one who paſſes his life in his ſtudy, or any other valetudinarian at the ſame time, we ſhall find the blood of the firſt thick and of a deep red colour, ſometimes covered with a white hard kind of ſkin, ſimilar to that which is found in inflammatory complaints; the blood of the ſecond, will be broken down, watery, pale-coloured, and ſlimy: that part of the blood which in the former inſtance was formed into a ſtrong ſkin, makes in the other patient's blood nothing but a ſoft jelly; the labouring man ſhould therefore rather attenuate his blood if ſuch a ſtate of the blood was a diſeaſed one, by many diluting liquors; the ſtudious man, on the contrary, ſhould endeavour to thicken the conſiſtence of this fluid, and for that reaſon ſhould abſtain from drinking much of any liquor, eſpecially warm fluids, which increaſe the tendency to a dropſy, already produced, as I have before obſerved, by a ſtudious and ſedentary life. M. Duverney gives a ſtriking inſtance of this in the Memoirs of the Royal Academy *. The ſtomach more eſpecially is firſt made ſenſible of the bad effects of warm fluids, which are hurtful in ſeveral ways. This organ is ſwelled by the quantity we ſwallow, its fibres are too much diſtended by the bulk of fluid, and at the ſame time relaxed by its quality; ſo that it muſt neceſſarily fall into a ſtate of relaxation and weakneſs, and loſe the powers neceſſary for its functions: the food therefore remains too long in the ſtomach, and occaſions a diſagreeable ſenſation of weight; this we en-

* Of the year 1703.

deavour

deavour to get rid of, by drinking a freſh quantity of ſome diluting liquor, which ſweeping away the half-digeſted aliments, gives a momentary relief, but in reality increaſes the cauſe of the diſorder. A ſecond bad effect of warm water, and in general of a large quantity of any drink whatever, is, that the juices inſervient to digeſtion are drowned in it, and thereby loſe their powers; and as they are of great ſervice in digeſtion, health muſt be impaired whenever their activity is blunted, more eſpecially as their office cannot be ſupplied by any other fluid; and that the moſt boaſted ſtomachics, ſeveral of which are frequently pernicious, can never be of ſo much ſervice as the ſaliva and the juices ſecreted in the ſtomach. Some people are apt to ſay, and perhaps ſome phyſicians, even that we ſhould drink a great deal to preſerve health; and particularly, that we cannot drink too much water: but we muſt be little acquainted with the laws of the animal œconomy, and the effects of a large quantity of fluid, to give ſuch advice. The relaxation of the ſtomach, the weakening of the digeſting fluids, the precipitation of the aliment before it is half digeſted, are the certain effects of this too prevalent cuſtom: and theſe inconveniencies take place in a greater or leſs degree, according to the quality of the drinks. Thoſe which are are ſwallowed hot or warm produce miſchiefs peculiar to themſelves, by deſtroying that ſoft mucus which lines the inſide of the ſtomach, the bowels, and in general all the hollow viſcera, and ſheathes their nerves from the too powerful impreſſion of food or any other bodies paſſing through them. When this mucus is once worn off by the continual waſhing of a warm drink, commonly ſaturated with ſome acrid

acrid particles, which render it ſtill more injurious, the nerves being bare, ſharp pains are felt after eating, unleſs we have been very careful in chooſing the ſofteſt kind of food. The inteſtines, deprived of their mucus in the ſame manner as the ſtomach, violent cholics are brought on, and the miſchief ſpreading to the internal coats of all the ſmaller veſſels; the nerves, irritated in all parts, acquire that degree of mobility, which numbers are ſo unhappily * afflicted with.

§ 72. The danger of theſe drinks is conſiderably increaſed, as I have before obſerved, by the properties of the plants infuſed in them; the moſt fatal of theſe when too often or too freely uſed, is undoubtedly the tea, imported to us ſince near two centuries paſt from China and Japan, which has ſo much increaſed diſ-

* Our author has certainly accumulated here the utmoſt that can be ſuppoſed in prejudice of this poor oriental leaf. It is certainly noxious in ſome caſes and conſtitutions; innocent, at leaſt, I really think, in many others, when moderately taken, for any exceſs, even of warm or of cold water, is bad; and it ſhould ſeem, from the letter of the eminent lawyer, which Dr. Tiſſot has the candor to ſubjoin to his note, that it may be uſed to medical advantage ſometimes. It were but impartial I ſhould think, and perhaps ſomewhat concluſive on the preſent topic, to enquire into the general health and longevity of the natives of the moſt populous empires in which it grows; and where the inhabitants drink ſtronger infuſions of it than ourſelves, and we may reaſonably ſuppoſe, not in leſs quantities. Credible writers, who have been in theſe countries, affirm, the inhabitants are ſtrangers to the gout, ſtone, and rheumatiſm, and very little ſubject to the ſcurvy. Fine tea has been often found to be ſalubrious, and ſeldom hurtful, although there may be inſtances where tea does not agree with ſome particular conſtitutions; ſuch perſons ought to abſtain from it: at the ſame time there are coarſe teas, which certainly muſt hurt even the ſtrongeſt conſtitution, and perhaps ſuch being uſed chiefly by the vulgar in Switzerland, has made our author ſo ſevere on this faſhionable drink; or patriotiſm might perhaps have had ſome weight with him in crying it down as an article of luxury.

caſes

caſes of a languid nature in the countries where it has been introduced, that we may diſcover, by attending to the health of the inhabitants of any city, whether they drink tea or not; and I ſhould imagine one and the greateſt benefits that could accrue to Europe, would be to prohibit the importation of this famous leaf, which contains no eſſential parts beſides an acrid corroſive gum, with a few aſtringent particles *, imparting

* A very able lawyer having read the firſt edition of this work, was kind enough to write me a very polite letter, containing an important obſervation, which he permitted me to communicate, and it may perhaps be uſeful to the public. "In the month of June 1765, I felt a ſlight heat of urine, "accompanied with pains I had never felt before; from the "account I gave of my caſe to M. le D. it appeared to him "that I had the gravel, he therefore ordered me ſome turpen-"tine pills, with an infuſion of pareira brava, and ſtick li-"quorice; this medicine made me void ſeveral fragments of "little ſtones, appearing as if they had ſurrounded ſome ſmall "nucleus, having one ſide concave, the other convex, with "angles, &c. they ſometimes gave me great pain in paſſing, "but moſt commonly were only juſt felt. I was generally "coſtive, but towards the latter end of November the uſe of "theſe medicines brought on a teneſmus, which made me "ſuffer exceſſively. M— ordered me to leave off all my me-"dicines, and to take glyſters, &c. Afterwards M. le D. "whom I conſulted, preſcribed ſome ſoap pills and other re-"medies; and the teneſmus came on again. Having read in "the Univerſal Hiſtory, that the Chineſe were never troubled "with the gravel or ſtone, "owing as it was ſaid to the great "quantity of tea they drank, which they uſed as a cold drink, "without mixing any thing with it," I was reſolved to try "the effects of this regimen. I had never uſed myſelf to tea, "ſo that the drink was new to me. I took a quarter of an "ounce of fine bohea tea, and pouring a quantity of boiling "water upon it, ſuffered the infuſion to ſtand till it grew cold. "I then poured it off clear, and drank three cups of it in "the morning, at the diſtance of about an hour between each; "two cups faſting, one after breakfaſt, and a fourth two "hours after dinner. The firſt day, the only effect produced "was a more plentiful diſcharge of urine; but the ſecond day "I voided in the morning twelve large fragments, a nucleus "of the ſize of a ſmall pea, with ſome gravel; and what "gave me more ſatisfaction was, that the uſe of the tea kept

imparting to the tea when ſtrong, or when the infuſion has ſtood a long time and grown cold, a ſtyptic taſte, ſlightly felt by the tongue, but which does not prevent the pernicious effects of the warm water it is drenched in. Theſe effects are ſo ſtriking, that I have often ſeen very ſtrong and healthy men, ſeized with faintneſs, gapings, and uneaſineſs, which laſted for ſome hours after they had drank a few cups of tea faſting, and ſometimes continued the whole day. I am ſenſible that theſe bad effects do not ſhew themſelves ſo plainly in every body, and that there are ſome who drink tea every day, and remain ſtill in good health; but theſe people drink it with moderation. Beſides, the non-exiſtence of any danger cannot be argued from

" my body open as in perfect health. I have ever ſince con-
" tinued drinking this fluid with ſome interruptions, ſome-
" times leaving it off for eight days, laſt ſummer even for one
" month; the effect has always been the ſame, and ſo far
" from having my ſtomach hurt by it, my appetite and my
" digeſtion is better; and although my diet is regular, yet I
" am not obliged to tie myſelf down to it. I drink ſome
" white wine of the coaſt, mixed with three fourths of wa-
" ter, and moſt commonly a middling-ſized tumbler full is
" ſufficient for one meal. I abſtain from cheeſe and ſalt
" meats, &c.

" I am now within about two months of ſeventy years of
" age; a very little is neceſſary to procure me two or three
" plentiful ſtools: before I uſed myſelf to tea, a ſlight infu-
" ſion of polypody was ſufficient for that purpoſe. I gener-
" ally uſed it when I had got a cold, and it agreed very well
" with me.

" I have given you this account, that you might endeavour
" to find out why tea has not had the ſame effect upon others
" who have tried it; perhaps they have not taken it in pro-
" per dozes, or perhaps they have not ſufficiently perſevered.

" In the laſt month, I repeated the experiment of putting
" ſugar into my tea three times; it increaſed my urine and
" kept my body open, but no fragments were voided."

This obſervation, which may be of ſervice, is not contrary, any more than the uſe the Chineſe make of tea, to what has been ſaid of the abuſe of it in Europe. *T.*

the

the inſtances of ſome few who have been fortunate enough to eſcape it.

§ 73. The effects of coffee differing from thoſe of tea, it cannot be placed in the ſame claſs; for coffee, although made with warm water, is not ſo pernicious for this reaſon, as it is on account of its being a powerful ſtimulus, producing ſtrong irritations in the fibres by its bitter aromatic oil. This oil combined as it is with a kind of very nouriſhing meal, and of eaſy digeſtion, would make this berry of great conſequence in pharmacy, as one of the bitter ſtomachics, among which it would be the moſt agreeable, as well as one of the moſt active. This very circumſtance is ſufficient to interdict the common uſe of it, which muſt be exceedingly hurtful. A continual irritation of the fibres of the ſtomach muſt at length deſtroy their powers: the mucus is carried off, the nerves are irritated and acquire ſingular ſpaſms, ſtrength fails, hectic fevers come on with a train of other diſeaſes, the cauſe of which is induſtriouſly concealed, and is ſo much the more difficult to eradicate, as this ſharpneſs united with an oil ſeems not only to infect the fluids, but even to adhere to the veſſels themſelves. On the contrary, when ſeldom taken, it exhilerates, breaks down the ſlimy ſubſtances in the ſtomach, quickens its action, diſpels the load and pains of the head, proceeding from interrupted digeſtions; and even clears the ideas and ſharpens the underſtanding, if we may credit the accounts of men of letters, who have therefore uſed it very freely. But let me be permitted to aſk, whether Homer, Thucydides, Plato, Xenophon, Lucretius, Virgil, Ovid, Horace, Petronius, to which I may venture to add Corneille and Moliere, whoſe maſter-

ſter pieces will ever be the delight of the remoteſt poſterity, let me aſk, I ſay, whether they drank coffee? Milk rather takes off from the irritation occaſioned by coffee, but ſtill does not entirely prevent all its pernicious effects, for even this mixture has ſome diſadvantages peculiar to itſelf. Men of learning, therefore, who are prudent, ought in general to keep coffee as their favourite medicine, but ſhould never uſe it as a common drink. The cuſtom is ſo much the more dangerous, as it ſoon degenerates into a habit of neceſſity, which few men have the reſolution to deprive themſelves of. We are ſenſible of the poiſon, and ſwallow it becauſe it is palatable.

§ 74. The choice of air is alſo a circumſtance worth attending to, it extends its influence to the ſoul, as well as the body; a wholeſome air, ſays Hippocrates *, gives underſtanding; the air of Bœotia and Thrace made the mind heavy, *Bœotum in craſſo jurares aere natum*; that of Athens enlivened it. and Plato ſays, that Minerva had choſen this place to bring up the wiſeſt of the human race †. It is incumbent upon the learned to chuſe as much as poſſible, a temperate, pure, and dry air, which is very beneficial to the lungs, encourages the circulation, and ſtrengthens the fibres: cold and dry air is tolerable; but damp air is very dangerous, it increaſes the diſorders incident to men of letters, relaxes, obſtructs perſpiration,

* De Morbo ſacro, N° 17.

† In his Timæus, at the beginning; and in another place he ſays; "It is certain that the ſituation of countries contri-"butes not a little to make men better or worſe." De legib. lib. 5.

produces

produces catarrhs, rheumatiſms, and palſies *. The learned are like Auguſtus, and all other delicate perſons, who cannot well bear the extremities of either cold or heat, eſpecially the latter, which are moſt obnoxious, as they cannot ſo eaſily guard againſt them as againſt the extremities of cold. In the ſummer time Milton was ſeized with a depreſſion of ſpirits, nearly reſembling idiotiſm. M. Dodart ſpeaks of a young lad eight years old, of a remarkably ſtrong genius, whoſe memory failed during the *dog-days*, and who recovered it again when the air had been cooled for a few days †; and M. Lanciſi, the famous phyſician to the two pope's Innocent XI. and Clement XII. declared in a letter to his friend Cocchi, that at a time when the great heats prevailed, if the air was not refreſhed by ſome gentle breezes, he was unable either to think or write ‡. Intenſe cold irritates the nerves and brings on convulſions in thoſe perſons whoſe nerves are very ſuſceptible; the learned ſhould therefore avoid the two extremes. They are not indeed always at liberty to chooſe their place of reſidence, nor is it in the power of every one to go to Baiæ or Alexandria in ſearch of the moſt wholeſome air. The country, which is the place beſt calculated for think-

* M. Pellegrini, an eminent phyſician, and profeſſor of anatomy at Venice, who has publiſhed a very accurate and elegant tranſlation of the Avis aux Peuples, with ſome very uſeful additional remarks, has given an obſervation which ſhews the danger of damp rooms; it is of a woman in the prime of life, and in very good health, who was always ſeized with an apoplexy whenever ſhe ſtaid in a damp place, which went off when ſhe removed into a dry air; and which never returned after ſhe had determined to quit that damp apartment. *Avertimenti al popolo.* T.

† *Hiſtoire de l'Academie Royale des Sciences, Ann.* 1705, *p.* 72.

‡ Lanciſi ad Cocchi, p. 47.

ing, and where we breathe the pureſt air, is not always convenient for men of letters, who are often obliged to fix themſelves in towns for many reaſons; they ought at leaſt to pick out as wholeſome a lodging as poſſible; their rooms ſhould be lofty, light, expoſed to the wind in the ſummer, and to the ſun in winter; they ſhould fix themſelves at a diſtance from places which emit unwholſome exhalations, ſuch as ſlaughter houſes, the ſhambles, tanner's yards, &c. they ſhould take great care frequently to renew the air of their rooms; and this is one reaſon why rooms with chimneys where the air is conſtantly renewed are more healthy than thoſe which are furniſhed with ſtoves *; another very important advantage they have over them, is that our feet is not ſo much expoſed to cold as they are with ſtoves.

§ 75. Cold in the feet, which we are liable to whenever we take no exerciſe, and are not near the fire, is hurtful to weak habits by bringing on heavineſs in the head, ſore throats, pains in the breaſt, and ſtubborn colds: it prevents perſpiration, interrupts digeſtion, occaſions violent cholics, and contributes greatly to diſturb ſleep. I have directed ſome learned men to warm the ſoles of their feet every night at the fire, before they went to bed, even till they felt pain, and by this means have brought on ſleep, after they had taken the moſt powerful opiates to no purpoſe, a kind of medicine generally pernicious to them. Others have found benefit from wearing conſtantly to the ſoles of their feet ſome gently ſtimulating plaſters. The

* Breviter & ſine tergiverſatione audeo definire, ſeſſionem multo ſalubriorum eſſe ante luculentum focum, quam in hypocauſto. *Plempius De togat. valet. tuend. p.* 57.

blood

blood is ſo apt to be carried up to the head in learned people, that they ought by no means to neglect any reaſonable method of preventing it. Some have been ſo bold as to tie a napkin dipt in cold water round their heads to enable them to continue ſtudying for a longer time; but this is a dangerous experiment which I by no means adviſe. It may be very proper, however, generally to keep the head bare or very lightly covered, and if we do not wear our hair, to waſh it every morning with cold water, as well the ears, face, and neck *. When we feel our head ſuddenly filled or heated, it is the beſt way to remain for ſome moments perfectly motionleſs, not even allowing ourſelves to ſpeak; we may afterwards take a little cold water, and eſpecially abſtain from ſtudy for ſeveral hours.

§ 76. The care all ſtudious perſons ought continually to take to divert the fluids from the head, ſhould prevent them from giving way to ſleep after dinner, which produces a contrary effect. If the cuſtom has once taken root, and that we cannot poſſibly bear up againſt it, we ſhould at leaſt make the ſleep as ſhort as poſſible, and imitate Auguſtus, whom I have already often propoſed as an example to men of letters; when he found himſelf ſleepy, "he quieted "ed himſelf for a ſhort time, in his cloaths, "only covering his feet and holding his hand "before his eyes †." Before we go to ſleep,

* Vid. Celſus De medicinâ, lib. 1. cap. 4.

† Sueton. in vit. C. O. Auguſt. c. 82.

I have ſpoken of the inconveniencies of ſleeping after dinner, in a letter to M. Haller, Epiſtol. de variolis, apoplex. et hydrope. This cuſtom, in uſe among the ancients, was neceſſary for them, to reſt during the heat of the day, in thoſe very hot countries, where they roſe early in the morning. T.

it is proper to looſen the collar of the ſhirt, and untie the garters.

§ 77. The uſe of tobacco is another pernicious cuſtom we could hardly have ſuppoſed men of letters would have been addicted to. "Tobacco, ſays the Lord Chancellor Bacon, has "been lately introduced amongſt us, and is a "ſpecies of henbane which diſorders the brain "juſt as opium does." It acts upon our ſenſes in the ſame manner as ſtrong liquors do, ſo that thoſe who begin to ſmoak are affected as perſons who have drank too much; in proceſs of time the effect ceaſes becauſe we uſe ourſelves to ſmoaking as we do to drinking. The cuſtom has been brought to us from ſavages, who having no other employment but that of hunting for their food, were delighted to find a relief againſt the tireſomeneſs of indolence, and which helped them to kill time. It could never have been imagined, two hundred years ago, that we ſhould one day have been under the neceſſity of warning the learned of ſome countries, of the great dangers they expoſe themſelves to by this practice.

Although tobacco may not be hurtful to every body, yet I may venture to affirm, that it is certainly pernicious to moſt people, leſs however to ſome than to others, and that it is not neceſſary for any one. Smoakers will undoubtedly exclaim againſt this doctrine, as drunkards would againſt a diſcourſe on the bad effects of wine; but it is ſufficient for me if I can prevent young people, who are not already ſlaves to this cuſtom, from contracting it, and open the eyes of thoſe who are entruſted with the education of youth, upon this point, which may appear on examination more deſerving of their attention than it has hitherto ſeemed to be.

This

This method of uſing tobacco * was firſt brought into Europe in 1560, by John Nicot, envoy from France to Liſbon, who learned it, if I miſtake not, from a Dutchman lately arrived from Florida. The ſmoke of the plant contains a very acrid ſalt, and a narcotic ſulphur wrapped up in the oily part †. The irritation produced by this ſalt on the ſalivary glands being ſtill increaſed by the heat, brings on a plentiful diſcharge of ſaliva, which being conveyed into the ſtomach, occaſions, in perſons who are not uſed to it, vomitings and violent purgings; theſe effects ceaſe gradually, but ſmoakers generally obſerve, that the body is kept open by this cuſtom; which they look upon as wonderfully beneficial, whereas it is no more ſo, than it would be to have an evacuation after taking an ounce of manna ‡. It may be aſked, whether this bitter purgative fume does not deſtroy the ſolitary and other worms, as we are every day told. I cannot take upon me to deny this particular, but at the ſame time know of no facts which prove it; and this advantage, if it even does exiſt, is much leſs certain than the miſchiefs ariſing from this acrimony, the chief of which is a too plentiful ſalivation, with all the diſorders attending it. In the firſt place,

* All this article, which appears to me out of its place, is taken from my letter to M. Haller, De variolis, apoplex. et hydrope. It was not in the firſt edition of this work, but the French tranſlator having inſerted it in his, I have been obliged to follow his example. *T.*

† We know that the oil of tobacco applied to a wound is a ſpeedy and deadly poiſon, although the leaves are ſometimes uſed to advantage. *T.*

‡ The purgative property of the tobacco is proved by the good effects ſometimes produced, and the violent operations at other times brought on by glyſters of the deceſtion, or ſmoak of this plant.

ſmoaking

ſmoaking certainly increaſes the ſecretion of the ſaliva, and if we ſmoak much it cannot all be ſwallowed, ſo that it muſt be ſpit out, and fails afterwards in the digeſtion, becauſe no more is ſecreted for the reſt of the day; the organs, accuſtomed to this irritation, perform their office but imperfectly when that ceaſes, ſo that we ſee people who ſmoak do not ſpit any more after they have laid aſide their pipes. 2dly, The powers of the ſtomach and inteſtines are impaired by the too frequent ſtimulus, the appetite is blunted, the ſtomach and inteſtines become ſluggiſh, digeſtion is at length diſturbed, and great ſmoakers are attacked nearly with the ſame kinds of diſeaſes as hard drinkers are. 3dly, The humours are even infected by the acrimony of the ſalts of the tobacco. 4thly, As ſmoaking makes one ſwallow a great deal of fluid, this quantity of drink becomes a cauſe of diſorders more or leſs dangerous according to the quality of the liquor.

The narcotic principle brings on other miſchiefs ſtill more alarming; it increaſes the diſorders of the ſtomach as all anodines do; it occaſions confuſion and pains in the head, vertigos, anxieties, lethargies, and apoplexies, of which we have but too many examples. It is evident from hence how dangerouſly we deceive ourſelves in ſmoaking to guard againſt apoplexies. I have myſelf known ſeveral perſons, and heard of a great many more, who have been carried off by this diſeaſe, at the very time they were uſing this famous preſervative, which is certainly rather a cauſe than a prophylactic of apoplexies. I know of no great ſmoaker who has ever lived to a very advanced age. De Heyde regretted very much a learned phyſician who killed himſelf in the prime of life by

by a too free uſe of tobacco; and it is not in the leaſt aſtoniſhing to ſee a liſt of the moſt grievous diſorders proceeding from this cauſe, and atteſted by authors of veracity. Van Helmont, Tulpius, the learned burgomaſter of Amſterdam, and many others, have known apoplexies brought on by this habit. The phyſicians of Breſlaw have reported to us the ſhocking inſtance of the two brothers of Sileſia, who having challenged one another who ſhould continue ſmoaking for the longeſt time together, died both apoplectic, one at the 17th, the other at the 18th pipe. The Ephemerides curioſorum naturæ, mention an epilepſy; De Heyde and Tulpius, very bad diſorders of the breaſt; P. Borelli, a jaundice; the late M. Werlhof, the gout; M. Van Sweiten, very troubleſome diſorders of the liver; M. de Haller, a conſumption, &c. all proceeding from this cauſe. I have known the moſt violent head-ach and a burning heat in the mouth and throat come on after ſmoaking a few pipes to carry off the tooth-ach, which was ſtill more violent after the uſe of this remedy.

Muſt we therefore conclude, that the ſmoaking of tobacco is of no uſe? At the ſame time that I abſolutely condemn it as a daily cuſtom, I do not ſay but that it may ſometimes prove an uſeful medicine. In relaxed and watery habits, this ſmoak, drawn through a long narrow tube, to the ſides of which the narcotic oil may ſtick, as ſoot to a chimney *, may ſometimes ſtimu-

* The Perſians, and ſome of the Turks, uſe pipes ſeveral feet long, they ſmoak ſitting or reclined after their manner, and part of the ſtem of the pipe paſſes through water. Ruſſel's Natural Hiſtory of Alep. p. 12. The ſmoak is by this method exceedingly ſoftened, and loſes almoſt all its acrimony; ſo that neither the taſte nor the ſmell of the tobacco remains. *T.*

late

late the ſalivary glands when too tardy, may quicken the action of the ſtomach and inteſtines, and diſſipate ſome diſorders proceeding from too great a quantity of ſerum. It has alſo been ſometimes uſed with ſucceſs to decreaſe a too plentiful ſalivation, when produced by an exceſſive relaxation of the ſalivary canals, upon which this ſmoak acts, as ſharp ſtomachics act upon the ſtomach when entirely relaxed. It may likewiſe have relieved ſome aſthmatic perſons when conveyed into the lungs with the air we breathe, by looſening and cauſing an expectoration of that viſcid phlegm which obſtructs their bronchiæ. I have read, that ſome fat people have been relieved by it; muſt not this effect have been produced by its decreaſing their appetite, rather quickening the action of their fibres, and ſharpening their humours? M. Hoffman has known violent cholics cured by it, but does not ſay whether this was by its acting as a purgative or an anodyne.

§ 78. Tobacco in powder with which we fill our noſtrils every inſtant, is alſo in ſome meaſure dangerous. The olfactory nerves are always irritated by it, and I know not of what uſe this irritation can be to a man in health. The ſtrongeſt men who uſe it too freely *, are troubled with vertigos; and it affects weak perſons ſo powerfully, that it makes them even faint away; and I know a great number of women who are ſeized with a fit of the vapours if they take a pinch of ſnuff faſting *. At length the ſenſe of ſmelling is blunted, and all the nerves fall into a kind of numbneſs. The moſt alarming

* A robuſt active country-gentleman who uſes ſnuff, has obſerved, that if he takes a pinch while faſting, it produces the ſame effects, as if he had taken a bumper of brandy, and for

alarming ſymptoms have been produced by a maſs of ſnuff collected in the ſtomach *, and I am thoroughly convinced, by ſome recent obſervations, of the truth of what has been ſaid with regard to ſnuff, that it weakens the memory and hurts the ſight, which is itſelf a very ſtrong motive for perſuading men of letters to lay aſide the cuſtom of taking it †.

§ 79. Theſe are the chief remarks to be made upon the cauſes of the diſeaſes incident to the learned, and the methods of preventing them; but when once the diſorders are come to ſuch a height as to require the aſſiſtance of medicine, they muſt be treated according to the nature of the ſymptoms, and the rules preſcribed by art againſt the particular kind of diſeaſe the patient may be affected with; but it is not the deſign of the preſent diſſertation to point out theſe; we ſhould, however, pay ſome regard to the kind of life the learned are engaged in, which has always ſome influence on

for the greateſt part of a day incapacitates him from applying to any buſineſs which requires thought and attention.

* Trilleri Diſſertat. de tabaci pharmaci abuſu, opuſc. t. 1. p. 221. This learned phyſician has very thoroughly ſhewn the dangers attending the uſe of this powder, which, he ſays, has been forbidden throughout all Spain under heavy penalties, by an arret of the 17th Dec. 1760. Many other ſovereigns, ſuch as the king of Pruſſia, the emperor of Turkey, the grand duke of Ruſſia, the pope, and the king of England, had endeavoured to prohibit the uſe of ſnuff in their reſpective dominions. *T.*

† Our author's general cenſures of tobacco are certainly juſt; and his limitations of it, in a medical way, very judicious; to which we may add, that thoſe who are already inſlaved to the habit of it, in any manner, are leſs likely to be relieved by a medical adminiſtration of it. To ſpeak from my own experience, I had ſmoaked, though never immoderately, for above twenty years of my life, being firſt compelled to it by very acute and even chronical paroxyſms of the tooth-ach. But above as many years paſt, I was alarmed with a ſecond touch of a vertigo from a ſingle pipe, which I immediately broke, and have never ſmoaked ſince.

the health, and requires a choice of medicines ſuited to the ſtate of the patient.

§ 80. When a learned man is really ill, the firſt thing to be recommended to him is entirely to leave off ſtudy; however hard the injunction may be, it is abſolutely neceſſary *, and it is hurting him very much to be in the leaſt remiſs upon this article. He muſt even forget that there are ſuch things as books and ſciences, his ſtudy ſhould always be locked, he ſhould give himſelf up to eaſe, chearfulneſs, and country diverſions and become what nature has made men, an huſbandman and a gardener: there is no other method of drawing him away from his reflections, and while they are indulged he cannot get well. If it were poſſible to diſcover a medicine which could ſuſpend the thinking powers for a time without danger, it would certainly be a ſpecific againſt the diſeaſes of the learned.

§ 81. When they are exceſſively weak, they ſhould ſometimes be put upon a milk diet, if they can be made to digeſt it. The famous Houdart de la Motte, who had always an infirm ſtate of health, was obliged to confine himſelf for a long time to a vegetable and milk diet †. At other times it is neceſſary, with a very ſoft kind of nouriſhment, to blend the uſe of ſtrong cordial wines, provided the breaſt ſtill remains free, and that there is no ſlow fever; ice-water for common drink is an excellent ſtrengthener, agreeing very well with the weak ſtomachs of the learned.

* Difficile eſt longum ſubito deponere amorem,
Difficile eſt: verum hoc, qua cubet, efficias.
Una ſalus hæc eſt, hoc eſt tibi pervincendum.
Catull. 82.

† Année litteraire. 1768. t. 1. p. 53.

§ 82.

§ 82. The bark is a very efficacious medicine, when the ſtrength is exhauſted from intenſe application; it reſtores digeſtion, ſtrengthens the veſſels, gives a proper conſiſtence to the blood when diſſolved, encourages the ſecretions, eſpecially perſpiration, gives power to the nerves, and ſuppreſſes their irregular motions. One of our beſt geometricians, when he found himſelf fatigued with calculations, uſed to recover his ſpirits by drinking a glaſs of the decoction of the bark he had always by him.

A new kind of wood exported from Guiana, has of late been uſed, it is called the Bitter * Wood of Surinam, or the Wood of Quaſſi: it is extremely light, and yet very hard; of a pale yellow colour, without ſmell; and of a bitter ſharp taſte; it is more bitter than the bark, and does not ſeem more diſagreeable; the eſſential difference between them, both with regard to their taſte and their properties, is that the quaſſi has not the aſtringency which the bark has; with reſpect to their effects, I could wiſh to have a greater number of obſervations on the quaſſi than I have been able to pick up ſince I uſed it, in order to make the compariſon with any degree of certainty; but from the experiments already made, I am inclined to think, that this new wood is perhaps preferable to the

* This wood of quaſſi, or bitter wood of Surinam, is not as yet an officinal here; nor have I ever ſeen it. The cortex eleutheriæ, frequently called alſo caſcarilla, I have known to be a conſiderable aſſiſtant to the bark in ſome tedious intermittents; improving, in my opinion, both its flavour and its ſtomachic virtues; eſpecially where ſweets do not diſagree, this bark being conſiderably fragrant, and ſtill more ſo on its being burnt ſlowly. The republic of medicine has an agreeable proſpect of being ſtill further obliged to Dr. Tiſſot, for communicating the event of the obſervations and experiments he is making on this medicinal wood. K.

bark, in the intention of ſtrengthening a weak ſtomach, recovering the digeſtion, diſſipating flatulencies, and relieving coſtiveneſs proceeding from debility, which makes it particularly uſeful to the learned; and the bark is ſtill a better medicine in all febrile, gangrenous, purulent, worm, and convulſive caſes *.

§ 83. Cold bathing, the effects of which I have before ſhewn to be analagous to thoſe of the bark, is alſo a very proper medicine; it ſtrengthens the ſtomach, muſcles, nerves; and even the ſoul itſelf, and enables them to ſupport freſh fatigues. I have known ſeveral young perſons throw themſelves into the cold bath after being wearied and depreſſed with ſtudy, who always found upon coming out, a peculiar ſtrength of mind, and a freſh diſpoſition to ſtudy. If weakneſs is exceſſive, the bath will rather do hurt than good; its firſt action is repelling of the humours upon the internal organs, and the benefits of it depend upon the reaction of thoſe organs; if they have not the power to re-act, the effect is more hurtful than advantageous.

The ancients were ſo well acquainted with the good effects of cold water, that they ſeldom ſuffered a day to paſs without bathing in it, however buſy they might be; it is alſo certain that they frequently uſed warm bathing, but they did it for reaſons which men of letters cannot alledge. If the learned ever experience much benefit from theſe ſort of baths, it muſt

* I am obliged to M. Schinz, an eminent practitioner at Zuric, for firſt making me acquainted with this excellent medicine, on which we find a diſſertation in the collection publiſhed by Linnæus, under the title of Amoenitates Academicæ, t. 6. and I hope it will ſoon be introduced into common practice. T.

be

be in peculiar caſes of heat, inflammation, and dryneſs; but in general they are not calculated to anſwer the principal intentions of cure in diſorders proceeding from exceſſive application: Auguſtus found himſelf hurt by them, and his phyſician Antonius Muſa ordered him the cold bath with complete ſucceſs, notwithſtanding his weakneſs. I have often been conſulted by men who had impaired their health by the labours of the mind, and who have recovered it by temperance, reſt, and particularly by the cold bath, the effects of which were very evident.

§ 84. Frictions are alſo of much uſe, and not to be neglected. If every morning, while in bed lying on our backs with the knees a little raiſed, we rub the ſtomach and belly with a piece of flannel, we increaſe the circulation in all the viſcera of the abdomen, prevent obſtructions diſſipate ſuch as have already begun to be formed, promote the diſcharge of the bile, facilitate the ſecretions, and reſtore the digeſtive powers. If we rub the whole body, perſpiration is encouraged, and the circulation quickened; which indeed is ſo much accelerated by ſtrong frictions continued for a long time, that a burning fever may be brought on, ſo that in ſome degree they may ſupply the want of exerciſe. The ancients who were ſenſible of all the advantages reſulting from this practice, not only uſed it as a remedy, but alſo as a daily method of preſerving health. Unfortunately the cuſtom had been almoſt entirely aboliſhed, till the Engliſh phyſicians began to reſtore it at the end of the laſt century. They cannot be of more ſervice to any than they are to the learned; but before they uſe them, I would adviſe them to read what Celſus and Galen have written upon this ſubject.

§ 85. How uſeful ſoever the medicines I have ſpoken of may be to the learned, mineral waters are not leſs beneficial. There are many ſorts of them, and they may all have their advantage in peculiar caſes; but thoſe which are moſt proper, and moſt commonly of uſe in the firſt ſymptoms of the diſeaſes incident to the learned, are the ſimple, acidulated, and ferrugineous waters *. The Author of nature, who has endowed them with great powers, has alſo ſcattered them widely abroad; ſo that there are few countries where they are not to be found, many where they frequently occur, and freſh diſcoveries are daily made of them. Among the moſt efficacious may be reckoned the waters of Egra, in Bohemia; of Tonnein, † in the archbiſhopric of Cologn; of Seltzer, in the electorate of Treves; of Peterſtal, in Alſatia; of Amphion, or Evian, in Savoy ‡; of Rolle, on the borders of our lake, in a happy ſituation; of Lauſanne; and to mention now the ſtronger, the waters of Forges, in Normandy; of M. Caſalbigi, at Paſſi; of Ribas, in Spain; of Tunbridge, in England; of Altwaſſer, in Sileſia, on the confines of Poland; of Medewi and Wickſberg, in Sweden; of Schuwalbach, in Franconia; of Spa, in the principality of Liege; and of Pyrmont, in the county of Waldeck: but the waters of Seltzer, Schuwalbach, and Spa, are moſt in uſe, and drank all over Europe. They always get the better of obſtructions in the viſcera of the lower belly,

* Some phyſicians call them alcaline, a name very contrary to that of acidulated; both names are juſtifiable; but I ſhould rather prefer that of alcaline, as it ſeems to agree better with the effects of the medicine. *T.*

† Acidulæ Antoninæ.

‡ Inſtead of the acidulated waters of Evian, the tranſlator has made me recommend the hot ſulphureous waters of Aix in Savoy; I correct this miſtake, becauſe it is a dangerous one. *T.*

recover

recover the digeſtive powers, reſtore ſleep, and make perſpiration eaſy; hence we may ſee how beneficial they muſt be to men of letters. If to the advantages derived from themſelves, we add thoſe which follow from leaving off application entirely; from the breathing free and open air; from the exerciſe we take, and the diet we follow at the ſame time, we ſhall readily account for the ſurpriſing cures effected by theſe waters, eſpecially if they are drank on the ſpot; firſt, becauſe they are then more powerful; ſecondly, becauſe the journey, the change of objects, and diſſipation, do as much good as the waters; for it is well known, that ſome of the learned have been cured of the hypochondriac diſeaſe, by a journey undertaken merely with a deſign of viſiting ſome libraries at a diſtance. The waters, however, ought never to be taken without the advice of a phyſician; for the more powerful they are, the more capable are they of doing miſchief when improperly applied. The learned Morhof, having had ſome cauſe of uneaſineſs in an advanced age, which brought on a cachochemic habit of body, determined to take the Pyrmont waters, contrary to the advice of his phyſician, and died on his return home *.

§ 86. When the learned are attacked with acute diſeaſes, we muſt not forget that the patient we have to deal with is a ſtudious man, and therefore ſeldom has the degree of ſtrength we find in others. It has already been obſerved, that they were leſs diſpoſed to inflammatory complaints, the diſorders of ſtrong, plethoric, and health men, than to putrid diſeaſes, which proceed from bad digeſtions and obſtructions in the viſcera of the abdomen. Bleeding, there-

* Behren's Select. Dietetic. p. 480.

fore,

fore, is leſs ſuited to their complaints than purging is *, for it lowers them too much; and I have remarked, whenever it was indiſpenſably neceſſary to take ſome blood from men of letters, whoſe health has been injured by ſtudy, that they were almoſt always ſeized with ſymptoms of a nervous hypochondriac diſorder. Gaſſendi's death is ſaid to be owing to bleedings, which deprived him at once of his ſtrength. M. Geſner, profeſſor of natural philoſophy at Zuric, one of the men who does the greateſt honour to Switzerland, having been bled at Paris for a ſlight fever, in the prime of his life, continued for ſix months in a languor he could not recover from, without much difficulty †. Another phyſician of my acquaintance ſhared the ſame fate; and all practitioners in cities, where there are men of learning, have undoubtedly had many opportunities of being convinced of this important truth; the bad effects of an improper bleeding preſcribed to a weak man are not ſo ſoon repaired as we may imagine.

§ 87. Purging is better ‡ adapted to ſtrike at the root of diſorders incident to the learned than bleeding; it is a kind of medicine which acts in the moſt ſucceſsful manner with them; and it is difficult to get fairly rid of their acute diſeaſes without this evacuation: indeed it is their favourite medicine, and they are ſo much prejudiced for it, that they are even apt to uſe

* Rammazini, p. 656.

† Vita Geſneri, p. 2.

‡ Gentle purging will be ſtill more preferable to bleeding, where the ſtudious patient is conſiderably advanced in years, rather depreſſed for his time of life, and not ſanguine. If bleeding ſhould be thought quite neceſſary, very elderly people bear the loſs of it better, by cupping, from the ſuperficial and capillary veſſels, than from the aperture of a conſiderable vein. *K.*

it

it needleſsly when in health: coſtiveneſs, to which they are ſubject, occaſions an uneaſineſs not to be relieved but by ſome evacuations; and the medicines which operate in this way appear to them extremely valuable; and indeed there would be no impropriety in uſing them, provided they choſe ſuch as are mild and ſtrengthening. The lord chancellor Bacon recommends rhubarb, which he uſed indiſcreetly *; but I ſhould prefer aloes, before preſcribed by Celſus, as it ſpoils the digeſtion leſs than any other purgative; it ſeems to act as a ſoap, and ſupply the place of the bile, the virtue of which is often loſt among the learned. If, on the contrary, the bile is too active, which makes them ſubject to continual colics, becauſe their nerves are conſtantly irritated, the mildeſt laxatives are to be employed, and the pulp of caſſia, freſh drawn, is the moſt ſuitable medicine in this caſe. But whatever purgative they may chuſe, I cannot caution them too much againſt the danger of recurring to it too often: theſe frequent purgings accuſtom the body to be badly nouriſhed, and it conſequently becomes weak; beſides, the inteſtines become ſtill more indolent, and at length will not perform their functions; the fine mucus lining them is deſtroyed, and leaves the nerves bare; from whence proceed violent and frequent colics, obliging the patient to confine himſelf to the very mildeſt regimen, from which he cannot

* "Non poſſum probare inſtitutum Verulamii, qui, ut in "ipſius vita traditur, ſex aut ſeptem diebus ante cibum tha- "barbaro uſus eſt, ut immune corpus excrementis redderet. "Satius fuiſſet, ſi correctâ paulatim victus ratione, ab omni "remedio abſtinuiſſet. Sic enim excrementis, ipſoque adeo "remedio purgante, totics aſſumendo, facile carere, vitamque "haud dubie longius producere potuiſſet." J. G. Bergerus de Commodis Vitæ ſobriæ. § 25.

ſwerve

ſwerve in the leaſt inſtance, without ſuffering the moſt excruciating pains.

§ 88. Whenever men of letters are attacked with a fever, we muſt attend to the ſtate of their brain, which is eaſily confuſed; ſo that the ſlighteſt fever often throws them into a delirium, the more dangerous, as it takes off from the influence of the nerves on the body, and therefore increaſes weakneſs, and diſturbs the criſis, which is always leſs perfect, in proportion as the nerves are more diſordered. The nerves of ſtudious men ſuffer from the time they begin to be indiſpoſed; they have immediately pains in their head; the day-light, the noiſe, company, and every thing wearies them; and I have often ſeen a ſimple fit of an ephemeran ague accompanied and followed with debility and other ſymptoms, ſufficient to alarm any one, who, not knowing the true cauſe, might be induced to conſider them as ſymptoms of a putrid diſorder.

§ 89. The convaleſcences of the learned are always tedious, their ſtrength recovers itſelf but ſlowly, the mind is particularly ſenſible of the effects of the diſeaſe; and I have hardly ſeen one of them in ſuch a ſituation, who has not complained of his memory and the weakneſs of his head, ſtrongly marked in his face by a fooliſh appearance. If they are incautious enough to return to their ſtudies before they are perfectly recovered, they lay the foundation of the moſt dangerous diſeaſes; the eyes, the head, and the ſtomach will be firſt attacked, and all the animal functions will feel the ſhock. The influence of intenſe application upon the nerves is ſo ſtrongly marked, that I have often known reflection, or even an engaging book, ſuſpend the operation of a purgative. The learned,

by

by neglecting to take care of themſelves in a convaleſcent ſtate, are expoſed to the hazard of never being able to recover their health completely, and making themſelves incapable of any great literary undertaking: it is playing a very loſing game, to ſacrifice the good of a whole life to the ſatisfaction of giving one's ſelf up a few days ſooner to the object of one's paſſion; but the paſſions never conſider the odds; and a paſſion for ſciences is perhaps the moſt blind of any.

Watchfulneſs fatigues learned convaleſcents more than any thing elſe; they recover their ſleep with much greater difficulty than other patients; ſometimes cordial wines act very favourably in this caſe; they produce the beſt effects, eſpecially with ſuch as are not uſed to them; they act as narcotics, and are not attended with the ſame inconveniencies: on the contrary, they reſtore the powers of the ſtomach, weakened by the quantity of warm liquors the diſorder has made it neceſſary to drink; they bring back the ſtrength, and raiſe the ſpirits.

§ 90. Whatever care the learned ought to take of their health, one of the moſt important is, to avoid making themſelves ſlaves to it: they are accuſed of giving way to cuſtom eaſily, and a rigid obſervance of cuſtom is a real ſlavery. I have known ſome men of letters ſo ſubjected to their regimen, that their mind was entirely dependant on their body. What indeed can we think of a man who is rendered unfit for any thing by his dinner being put off for an hour, the heat of his ſtove being altered, or the preciſe hour of his going to-bed or getting up interrupted? I remember to have read, ſeveral years ago, a work written to ſhew, that men of letters ought to indulge themſelves in all

all ſorts of conveniencies: a man who ſuffers it certainly not able to ſtudy with attention; but the real way for men of letters to indulge in all their conveniencies, is to uſe themſelves to curtail their wants.

§ 91. I have expoſed as circumſtantially as poſſible, the cauſes, ſymptoms, preſervatives, and cure of the diſeaſes produced by intenſe application, you will find however, that the taſk is not completed, and you will be ſenſible, gentlemen, that I have omitted the moſt certain preſervative of health, I mean that contentment of mind proceeding from integrity of manners; an upright conduct is the parent of chearfulneſs, and chearfulneſs is the promoter of health. The man of letters finds an example for himſelf in Horace's deſcription of the happy man:

"Mens conſcia recti in corpore ſano."

Wiſe and learned have long been ſynonimous terms; and virtue and knowledge was learned in the ſchools; a man of learning and a profligate was a being unknown:

"Quid muſæ ſine moribus vanæ proficiant?"

Men were deſpiſed who employed themſelves only in ſearching after what was good and honeſt, ſaw what was right and did what was wrong; and conſequently deprived themſelves of that moſt pleaſing of all ſatisfactions ariſing from the remembrance of a good action; the effect of which, as of all agreeable ſenſations, is to impart vigour, facility, and regularity to all the animal functions, which are the true foundations of ſound health: whereas melancholy, the conſtant attendant of remorſe, relaxes the fibres, diſturbs the digeſtions, deſtroys

ſtroys the powers, and leads on to a conſumption. I cannot call to mind, without emotion, the pangs of ſome men, who having abuſed the talents beſtowed on them, have been ſeized with horrors difficult to deſcribe, in the laſt moments of an ill-ſpent life. In the contrary, I reflect with infinite pleaſure on the calm and comfortable end of ſuch men as "have lived," according to Pliny's advice, "through the "whole courſe of their life, as one would wiſh "to live upon a ſick-bed;" and who have enjoyed, even to the brink of the grave, in an advanced old age, the ſatisfaction of an irreproveable conſcience, and preſerved the quickneſs of their ſenſes and the powers of their underſtanding. The celebrated hiſtorian Paulus Jovius, having enquired with ſurpriſe of Nicol. Leoniceni, one of the moſt learned men in the fifteenth century, by what art he had preſerved, during the ſpace of ninety years, a ſound memory, perfect ſenſes, an upright body, and a vigorous health, was anſwered by that phyſician, that it was the effect of upright manners, tranquillity of mind, and temperance *.

§ 92. It would be needleſs to enter into any farther particulars, I ſhall therefore conclude with a reflection, which may perhaps be neceſſary to prevent any ſophiſtical concluſions being drawn from this work. It repreſents indeed a picture of diſeaſes brought on by exceſſive application: but it muſt not be argued from

* "Vividum, inquit, ingenium perpetuâ vitæ innocentiâ, "ſalubre vero corpus hilari frugalitatis præſidio facile tuemur." Petr. Caſtellani Vitæ Medic. &c. Leoniceni was born at Vicenza in 1428, and died at Ferrara in 1524, after having taught and practiſed phyſic upwards of ſixty years in that place. T.

hence, that I condemn ſtudy as a dangerou thing, or that I am deſirous of raiſing a diſguſt to it. The great queſtion concerning the utility of the ſciences has been much canvaſſed, and I am far from having any deſign of engaging in the conteſt; for even if it ſhould be true, which is not however my opinion, that upon the whole they do not contribute to the happineſs of ſociety, it can hardly be denied, that learning adds to the happineſs of the perſon who poſſeſſes it, provided he has acquired it without the expence of his health, or the neglect of his ſocial duties *.

Although I have given many inſtances of the danger of early application, I have not meant to inſinuate that the earlieſt days of childhood ſhould be conſumed away in total idleneſs; this is not at all my opinion. I think children are ſuſceptible of acquiring ſome degree of knowledge in the firſt years of their life †; but we ſhould certainly give them theſe impreſſions in a different manner than we have done hitherto. It ſeems particularly a thing of great conſequence, that the early education of children ſhould be directed with a view to the profeſſion they are deſigned for: the education of young men intended for ſtudy ſhould be differently managed from that of others, and their faculties ought to be taken more particular care of in

* "Adoleſcentiam alunt, ſenectutem oblectant ſecundas res "ornant, adverſis ſolatium præbent, delectant domi, non im"pediunt foris, pernoctant nobiſcum, peregrinantur, ruſtican"tur." Cicero Orat. pro Archia.

† "Quamlibet parum ſit, quod contulerit ætas prior, ma"jora tamen aliqua diſcet puer ipſo anno, quo minora didi"ciſſet. Hoc per ſingulos annos prorogatum in ſummum pro"ficit: et quantum in infantiâ præſumptum eſt temporis, a"doleſcentiæ acquiritur." Quinctilianus de Inſtit. Orat. lib. 1 cap. 1.

infancy.

infancy. Let us ſuppoſe ten children of nine years old, deſigned for different profeſſions; I could wiſh that the one deſtined for the ſciences ſhould be the leaſt knowing at that age; at twelve years, the age when Paſcal and Newton were yet unacquainted with Latin, he ſhould begin to gain the aſcendency, and at ſixteen he ſhould leave them far behind. In condemning thoſe who give themſelves up to ſtudy with paſſionate imprudence, it was not my deſign to blame thoſe who cultivate the ſciences with wiſdom and propriety; for if we are expoſed to the moſt cruel diſorders by giving up every thing to the love of letters, on the other hand we expoſe ourſelves to ſhame by remaining in ignorance.

The Ynca Atabaliba having found out the ignorance of Fr. Pizarre, conceived an invincible contempt for him; which circumſtance appears to me an argument ſufficient to prove the neceſſity of education.

FINIS.